THE LANCET.

VOL. II.] LONDON, SATURDAY, AUGUST 11, 1838. [1837-8.

LECTURES
ON THE
THEORY AND PRACTICE OF MEDICINE;
NOW IN COURSE OF DELIVERY AT THE THEATRE OF ANATOMY AND MEDICINE, WEBB-STREET, SOUTHWARK.

BY

MARSHALL HALL, M.D., F.R.S. L. & E.
&c., &c.

DISEASES OF THE GENERAL SYSTEM.—*The eruptive fevers; diagnosis; complications; enumeration of the eruptive fevers. Rubeola, its history, symptoms, and complications; the indoles and treatment; rubeola sine catarrho; rubeola nigra; scarlatina and its species; history; treatment; diagnosis of rubeola and scarlatina.*

GENTLEMEN:—I have gone over that important division of my course, which includes the *Diseases of Individual Systems*. I now proceed to treat of the

DISEASES OF THE GENERAL SYSTEM;

and of these I select for my present lecture, the important subject of FEVERS, and, as the most frequent in private practice, I shall commence with

THE ERUPTIVE FEVERS.

Since the appearance of the classical work of the late Dr. Willan, and the useful abridgment of Dr. Bateman, nothing seems wanting to the description and portraiture of cutaneous diseases, both acute and chronic. And if to distinguish these several diseases from each other were all that were required, the diagnosis might be said to be almost complete. But this is not all. The treatment of these diseases does not depend merely upon the questions, whether it be rubeola, or scarlatina, or other eruptive fever; but upon the question whether the disease, be it what it may, be complicated with internal organic changes, or modified by constitutional circumstances.

These are the really important points for diagnosis, the important questions on which recovery or death depends. And I do not hesitate to say, that, in these respects, but especially in that of the complications, the subject is involved in the most intense obscurity, and offers ample scope for investigation. If there be anything peculiar in these complications, that peculiarity is completely unknown, and must be established by new examinations. If such peculiarities of morbid change require peculiarities in the treatment, this too remains to be ascertained by future inquiries.

It has not even been ascertained whether the affection of the mucous membranes be merely inflammatory or whether it be specific; that is, whether it be rubeolous in rubeola, and scarlatinous in scarlatina, as it is variolous in variola. But I believe it is so. This observation applies not to the eyes, fauces, larynx, trachea, and bronchia only, but also to the stomach and intestines.

But the observation is of still greater moment when it is considered in connection with the other textures, the morbid affections of which in eruptive fevers, appear scarcely to have been examined at all. Yet it is certain that the arachnoid, the pleura, and the parenchymatous substance of the lungs, as well as the mucous membrane of the bronchia and of the stomach, undergo morbid changes in rubeola; that the arachnoid, as well as the parenchymatous, serous, and mucous textures of the thorax and abdomen, the subcutaneous cellular tissue, and the joints, are involved in the course of scarlatina. Yet where do we meet with any satisfactory account of these morbid changes? Willan and Bateman, Rayer and Biett, Laënnec, and Andral, are searched in vain for the morbid anatomy of eruptive fevers. There are merely scattered opinions or facts. All is vague, general, and unsatisfactory. A work upon this subject at all comparable to that of M. Louis upon the gastro-entérite, would be an inestimable contribution to medical science.

But, besides the complications, there is another interesting subject of inquiry, especially in regard to eruptive fevers: it is the remoter consequences or sequelæ,—

These are acute and chronic. The former affect the head, the chest, the abdomen, the cellular membrane. The latter are, principally, chronic inflammation and tubercles.

The science of medicine is not so simple as it has been made to appear. When our books present a faithful portraiture of nature, we shall discover that, both during the course and after the course of many diseases, we have still to watch the patient, if we would early detect diseases which only require to be overlooked and disregarded in their beginnings, to be placed beyond the reach of remedy. I expect much will really be effected in simplifying the subject by the mode which I have adopted of placing these arrangements before the student. The eye, the mind, will speedily become familiarised with the multitude of events which occur, and then the principal difficulty will be overcome.

In the present lecture I purpose to notice those objects of the diagnosis upon which the treatment principally depends: these are, the conditions of the system and of the internal organs. In a subsequent lecture I shall compare and contrast the different rashes, with the view of determining the question of the subsequent safety or liability of the individual, in regard to the different contagious eruptive fevers respectively.

There are several points for consideration in reference to each of the eruptive fevers. They are—

1. The prevailing Epidemic.
2. The Latent period.
3. The Febrile period.
4. The form and locality of the Eruption.
5. The peculiar Indoles of the disease.
6. The form and locality of the Internal Affection.
7. The Sequelæ.

Rubeola and scarlatina, variola discreta and variola confluens, the different forms of erysipelas, are remarkably different in all these respects, as I shall state presently, and the difference is one of great practical moment.

There are no diseases which try the skill of the physician, in reference to early diagnosis, so much as eruptive fevers. It is so important to determine, on the very first appearance of the eruption, this question of the diagnosis, that I shall take great pains to point out the source from which it flows; the fate of a family, of a school, and the reputation of the physician, frequently depend upon the promptitude and accuracy with which the disease is detected. The lesson is one which cannot be learnt in hospital practice.

I shall proceed to enumerate the principal eruptive fevers. They are—

1. Rubeola.
   1. *Vulgaris.*
   2. *Sine Catarrho.*
   3. *Nigra.*
- II. Scarlatina.
   1. *Simplex.*
   2. *Anginosa.*
   3. *Maligna.*
- III. Variola.
   1. *Discreta.*
   2. *Confluens.*
   3. *Modified.*
- IV. Varicella.
   1. *Varicella lenticularis.*
   2. *Varicella conoidalis.*
   3. *Varicella globata.*
- V. Vaccinia.
   1. *Perfect.*
   2. *Imperfect.*
      1. *The Vaccine Pustule.*
      2. *Ulceration.*
      3. *Irregular Vesicles.*

I.—Rubeola.

Rubeola, besides its ordinary form of *rubeola vulgaris*, occasionally occurs unaccompanied by catarrhal symptoms, which it is designated by Dr. Willan *rubeola sine catarrho*; at other times the rash, which is usually florid, becomes livid, when it is called *rubeola nigra.*

1.—*Rubeola vulgaris.*

The History.—Rubeola is unequivocally contagious. A latent period of from ten to fourteen days intervenes between exposure and the development of the febrile symptoms. The catarrh appears on the second or third day of fever. The rash first appears on the face and neck on the fourth day, and on the chest and extremities on the fifth; on the sixth it begins to decline on the parts first affected, whilst it is vivid on the general surface. On the seventh, eighth, and ninth days, the rash fades, leaving the cuticle in a state of exfoliation.

The Symptoms.—Rubeola is early characterised by the conjunction of the fever, and a sensation of stricture across the forehead and eyes, with a disposition to sleep; to these symptoms are added, on the second and third days, redness of the eyes, and turgidity of the eyelids and nostrils, a copious flow of tears, and frequent sneezing, a sense of soreness about the throat, hoarseness, a frequent, dry cough, difficulty in breathing, and a sense of constriction across the chest. The rash commences with distinct, red, and nearly circular dots; afterwards larger patches appear, which tend to assume crescentic forms. The surface of the skin is gently raised; the wrists and hands are papillated; the colour of the rash is deeper and less vivid than that of scarlatina, being of the raspberry hue; miliary vesicles are frequently seen on the neck, breast, and arms. The general surface is less tumid than in scarlatina.

The Complications of rubeola are the following.

I. Inflammation of the Eyes and Nostrils.
II. Inflammation of the Ears; or Earach.
III. Efflorescence on the Throat.
IV. Inflammation—1. of the Larynx;
2. of the Trachea and Bronchia;
3. of the substance of the Lungs;
4. of the Pleura and Pericardium; or
5. of the Peritoneum.
V. Appearance of the Catamenia.
VI. Sudden attacks of Inflammation of the Brain and its Membranes,—with or without—
VII. Acute Inflammation of the Cellular Membrane, with Anasarca.

The Sequelæ are—

I. Chronic—1. Cephalic, or
2. Thoracic, Inflammation.
II. Tubercles.

This table of complications and sequelæ should be vividly present to the mind whenever we visit a case of rubeola.

There are several occasional events in the history of rubeola, which I will enumerate in this place: they are—

I. The recurrence of the Rash.
II. The recurrence of Rubeola.
III. The Interruption of another disease.
IV. The Conjunction of another disease.

The recurrence of the rash and febrile and catarrhal symptoms soon after the first series had disappeared, is mentioned by Dr. Willan. It should, therefore, be borne in mind as a possible event.

The recurrence of rubeola in patients having previously gone through this disease was first pointed out by Dr. Baillie, and afterwards witnessed both by Dr. Willan and Dr. Bateman.

Dr. Bateman gives two cases in which other diseases were interrupted by the recurrence of rubeola: the first was pertussis; the second, the crowing disease of infants. His remarks may be compared with the observations of Dr. Willan.

The conjunction of another disease with rubeola has been noticed by several authors. Dr. P. Russell gives two cases of the simultaneous existence of rubeola and variola. The same fact was observed by Dr. Thomson of Edinburgh.

The Morbid Anatomy of rubeola, in its simple forms, is, in my opinion, unknown; that of its complications and sequelæ is supposed to be perfectly similar to that of affections of the several parts enumerated in the preceding table, not rubeolous. Is it so?

There is still scope for an interesting work on the morbid anatomy of this and other eruptive fevers and their complications.

The Indoles.—I employ this term merely to attract the attention of the student to an important subject,—the difference of character or tendency of different diseases. Typhus is disposed to ulceration and sloughing. The disease of which I am now treating is characterised by a disposition to adhesive inflammation. That which follows is again disposed to ulcerative inflammation. On this peculiar indoles the morbid tendencies and the treatment greatly depend, and there is no point in connection with the eruptive fevers so important in a practical point of view.

We have but to look over the list already given, to see that the complications of rubeola are of the character of adhesive inflammation: false membranes are frequently formed, and the effusion of serum is very common; ulcerations are rare, and we seldom observe either sloughs or the effusion of sanguineous fluid, as in typhus or scarlatina. The indoles of rubeola is inflammatory; that of scarlatina, typhoid.

The Treatment.—Rubeola bears the loss of blood well. Its complications frequently require it.

In simple rubeola we have, however, frequently but to watch the patient through the disease, giving salines, mild aperients, and tea and barley-water for diet.

We avoid exposure to cold for fear of repelling an eruption which is less deeply seated, less diffused, less permanent and certain, and attended with less heat than that of scarlatina simplex, or anginosa. For the same reason the cold or tepid affusion is a dubious remedy.

The retrocession of the eruption from exposure to cold, or the administration of purgatives, is said to occasion delirium, restlessness, difficulty of breathing, pain of the bowels, and diarrhœa, and greatly to endanger the patient's life. A case of dyspnœa from this cause is related by M. Andral.

In the cases of the complications bloodletting is the remedy. The patient being placed perfectly upright, and bled to syncope, it is found that there is great tolerance of loss of blood, and this tolerance is further discovered to be precisely in proportion to the diffusion and severity of such complication. Bloodletting is at once its measure and its cure.

This is especially true of the inflammation of the brain and its membranes, of the cellular membrane, but especially of the far more common case of inflammation of the larynx, the trachea, the bronchia, the lungs, the pleura. In all these cases we must bleed fully and systematically. We must be guided by the effect on the symptoms, and by the quantity and appearance of the blood taken, in reference to the repetition of the remedy.

Bloodletting must be succeeded by antimonials and mercurials; the former in nau-

seating doses, the latter followed by mild aperients.

The sequelæ of rubeola require the appropriate treatment of chronic inflammation or of tubercles, and especially local bloodletting and gentle tonics, with light animal food, sea breezes, &c., in the latter.

Rubeola sine Catarrho.

Dr. Willan observes,—"When the measles are epidemical, a few cases occur wherein the eruption goes through its different stages without any cough, difficulty of breathing, or inflammation of the eyes, without much alteration of the pulse, or any febrile symptoms." It does not, then, "appear to emancipate the constitution from the power of the contagion, nor to prevent the accession of the rubeola vulgaris at a future period."

Rubeola nigra.

Dr. Willan observes,—"I never saw the rubeola vulgaris intermixed at an early period with petechiæ; but it sometimes happens, about the seventh or eighth day, that the rash becomes suddenly black, or of a dark purple colour, with a mixture of yellow." This appearance has continued ten days, in some cases longer, with no other symptoms of fever than a quick pulse and a slight degree of languor.

SCARLATINA.

Scarlatina occurs under three forms: scarlatina simplex, scarlatina anginosa, and scarlatina maligna.

I. *Scarlatina simplex.*

The History.—Scarlatina is eminently contagious. The eruption appears after a latent period of five or six days, and on the second day of febrile symptoms. It consists of a close scarlet efflorescence, and first occupies the face and neck, and, in the course of another day, is diffused over the general surface, the nostrils, the inside of the eyelids, cheeks, and lips, the tongue, the palate, and the fauces. On the fifth day the rash begins to decline; it disappears on the sixth and seventh, leaving the cuticle in a state of exfoliation.

The Symptoms.—The scarlatina begins with debility, heaviness, and slight chills, which lead to great heat and tumidity of the general surface. Numerous specks, or minute patches, of a vivid scarlet, appear about the face and neck on the second day. In the course of the third day the efflorescence becomes almost continuous over the whole surface of the body, and of a full scarlet hue, especially on the loins, nates, and in the flexures of the joints. The rash is most vivid in the evening, and on the third and fourth days. Some papulæ appear. On the fifth day it begins to decline, the scarlet hue being less vivid, and the interstices between the patches augmented.

The tongue is white in the middle, of a scarlet redness at the edges, and marked by elongated vivid papillæ at the point and edges; the face is tumid. The scarlet efflorescence may sometimes be observed over the tunica conjunctiva, and the eye is bright and humid, but without the flow of tears observed in rubeola.

Scarlatina anginosa.

The History and Symptoms.—In this form of scarlatina the febrile symptoms are more severe, the rash appears later, as on the third day, and is less diffused, and more in scattered patches; it sometimes vanishes and reappears; its whole duration is longer, and its colour deeper, than that of scarlatina simplex. To the fever and efflorescence are superadded swelling of the tonsils, velum pendulum palati, and uvula, with florid redness, sloughs, and ulcerations. The voice is hoarse and the deglutition difficult, and there is cough.

I should also mention that, as in S. simplex there was the rash without the sore throat, so, during the prevalence of scarlatina, an affection of the throat frequently occurs, in those exposed to the contagion, without rash on the skin.

There are frequent headach, delirium, restlessness, great heat, frequent pulse, quick respiration, languor and faintishness, nausea and vomiting.

The complications in scarlatina anginosa are—

I. Affections of the nares, fauces, pharynx; (the glottis and larynx?)
II. 1. Cephalic.
2. Thoracic,
3. Abdominal, Inflammation, or Congestion.
III. Enlargement and softening of the parotid, submaxillary, and mesenteric glands, the kidneys, &c.

The sequela are—

I. An affection of the Joints, similar to Rheumatism.
II. Inflammatory Anasarca.
III. Meningitis.

Scarlatina maligna.

The History.—The rash, in this form of scarlatina, appears late, and is uncertain in its duration: it sometimes disappears in a few hours, and reappears at the expiration of a week, continuing two or three days. In one case Dr. Willan observed its reappearance, in numerous patches, a third time, on the seventh day from the second eruption: it remained two days.

The Symptoms.—There are dark-red flushings of the cheeks, fullness and lividity of the neck, and dull redness of the eyes. The efflorescence is usually faint except in a few irregular patches, and presently changes to a dark or livid red colour; it is often intermixed with petechiæ. There are ulcerations

of the tonsils and adjoining parts, covered with dark sloughs and surrounded with lividity. The tongue is tender and ulcerates on the slightest injury. An acrid discharge takes place from the nostrils, with soreness, chaps, and blisters, about the nose and lips. The breath is extremely fœtid. The state of the whole system is typhoid.

With these appearances there are in different instances the following functional complications:—

I. Deafness, delirium, coma.
II. Rattling, laborious respiration, teazing hawking, and cough.
III. Constriction of the jaws and dysphagia.
IV. Violent pains of the bowels, diarrhœa.
V. Petechiæ, vibices, hæmorrhages.
VI. Vesications on the hands and feet.
VII. Sudden and unexpected dissolution.

Many patients sink at an early period, without any admonitory symptoms.

There is doubtless a corresponding condition of the structures. But, unfortunately, there are few accurate cases of *post-mortem* examinations in scarlatina maligna on record. There are, however,

I. Ulceration of the posterior nares, the fauces, tonsils, œsophagus, (the larynx, and trachea?)
II. Inflammation, or congestion, in the—
1. Head,
2. Chest, or
3. Abdomen.

An occasional event in scarlatina, and especially in scarlatina maligna, which should be carefully borne in mind, is that of sudden death,—apparently from the condition of the fauces. I imagine that a slough, in separating, has occasionally been drawn into the larynx and induced asphyxia.

The Diagnosis.—The principal point in the diagnosis of scarlatina is its distinction from rubeola. I shall therefore compare and contrast these two important diseases in this place:—

1. *The prevailing Epidemic.*

RUBEOLA.

2. *The latent period.*

From 10 to 14 days.

3. *Symptoms.*

Febrile catarrh, coryza, ophthalmia.

4. *Appearance of the Eruption.*

On the 4th day.

5. *Form of the Eruption.*

Circular dots; crescentic arcs.

6. *The Indoles.*

Inflammatory.

7. *Principal Complications.*

Affections of the anterior nares, the larynx, trachea, lungs, &c.

8. *Principal Sequelæ.*

Thoracic disease.

1. *The prevailing Epidemic.*

SCARLATINA.

2. *The latent period.*

From 5 to 6 days.

3. *Symptoms.*

Febrile sore throat, great heat and tumidity of surface.

4. *Appearance of the Eruption.*

On the 2nd day in S. s.
3rd in S. a.
later still in S. m.

5. *Form of the Eruption.*

Diffused.

6. *The Indoles.*

Typhoid, and especially in S. maligna.

7. *Principal Complications.*

Affections of the posterior nares, fauces, &c.

8. *Principal Sequelæ.*

Inflammatory anasarca; meningitis.

The contagion of scarlatina is altogether more active than that of rubeola: the latent period, the period which intervenes between the beginning of the febrile symptoms and of the rash, are both shorter.

In reference to the scarlatina maligna, it may be observed that the rash is later in its appearance, more uncertain in its duration, less diffused, less frank altogether, than the scarlatina anginosa; it is also faint and livid, and mingled with petechiæ; there is less heat of surface, less tumidity; the fauces are sloughy, ulcerated, and attended by an ichorous discharge.

In reference to the indoles of these two diseases, I would remark that rubeola principally attacks the parts of the respiratory organs below, whilst scarlatina is chiefly situated above the glottis. This important point appears to be the boundary of the internal affection in both these affections respectively.

Another distinction is, that in severe cases of rubeola there is the constant tendency to the deposit of albumino-fibrine; in scarlatina, on the contrary, there is the disposition to ulceration, and slough, and ichorous discharges. Bloodletting is the remedy in the former case; cinchona, in the latter.

I need not observe that these observations are very general. Bateman and Laennec have both seen cases of croup in connection with scarlatina. With their observations we may contrast the remarks of M. Bretonneau, who states that during, twenty years, he had not observed the affection of the fauces to extend to the larynx.

The morbid anatomy of scarlatina is as little known as that of rubeola. M. Louis observes, "I have observed, in five subjects, in the latter portion of the ileum, disease of a greater or less number of the solitary glands, which were more or less developed, white or reddish, and this appears to me to be worthy of attention; three of these cases were individuals who had died of

scarlatina, the only ones attacked with this affection which I have examined. This would seem to indicate that the development of these glands (supposing such to be the lesion in question) is, if not constant, at least very frequent amongst those who die of this affection." The whole subject is open to new inquiry. The particular condition of the skin, of the mucous membranes, of the parenchymatous textures, of the blood, &c. is still unknown.

The Treatment.—The remedies in scarlatina are those of the synochus acuta, or of typhus, according as it assumes the simple, anginous, or malignant forms. In the first case, an emetic, a mild dose of hydrargyri submurias, a mild aperient, mild antimonials, and salines, are the proper remedies. The angina may require bloodletting, general, but especially local. The malignant form requires the cinchona, and remedies directed to the sad condition of the posterior nares and fauces, such as the inhalation of steam, gargarisms with the chloride of soda, the nitrate of silver, &c., external fomentations, &c.

The principal continued treatment is the regulation of the bowels, the diet, the temperature, &c. The bowels should be well moved daily; the diet should be mere barley-water, or gruel; the atmosphere of the room should be fresh and cool; and, if there be much heat of skin, the tepid or cold affusion should be used. The cold affusion was particularly recommended by the late Dr. Currie. He observes, "I must again enforce the superior advantage of using the affusion early in this disease; and the propriety of ascertaining that the skin is dry, and the heat of the patient greater than natural, in all cases, especially in such as are advanced, and where, of course, the strength is considerably impaired. It has come to my knowledge, that in two cases of scarlatina, of the most malignant nature, the patients have been taken out of bed, under the low delirium, with the skin cool and moist, and the pulse scarcely perceptible. In this state, supported by the attendants, several gallons of perfectly cold water were madly poured over them, on the supposed authority of this work! I need scarcely add, that the effects were almost immediately fatal."

A free state of the bowels is the most important preventive of the inflammatory anasarca, so apt to follow scarlatina. When the sequela does occur, bloodletting is the principal remedy, but for the anasarca itself, and as a preventive of meningitis.

In the case both of anasarca, and especially of meningitis, there is an extraordinary power of bearing the loss of blood. Again, the plan of bloodletting which I have proposed becomes the most important guide in practice, in the diagnosis, and further treatment of the disease.

LECTURES
ON
MATERIA MEDICA AND THERAPEUTICS;
NOW IN COURSE OF DELIVERY
AT THE
WINDMILL-STREET SCHOOL OF MEDICINE
BY
GEORGE G. SIGMOND, M.D.

MOMORDICA ELATERIUM.—*Medicinal powers of this purgative; its occasional bad effects; doses; elaterium in dropsy; history of the plant; mode of gathering it; accidents produced; the extract.* ALOES.—*Botanical description; physical properties; mode of action.*

MORMORDICA ELATERIUM.—THE WILD CUCUMBER.

GENTLEMEN:—Solenander laid it down as an axiom, "Elaterium esse in Catalago Diaboli quo necat homines," but the practice of Sydenham, of Lister, of Bontius, of Hoffmann, fully refutes this indiscriminate censure of a most important medicine. It is to Dr. Ferriar we are in modern days indebted for our knowledge of the effects of this remedy in dropsy, and for the revival of the use of a purgative which, judiciously administered, is one of the most valuable resources of the healing art.

I am fully persuaded from much experience of elaterium, that its powers of removing accumulations which have taken place in the cavities of the human frame, surpass those of any other medicine, and am firmly convinced, with Dr. Ferriar, that the astonishing relief which it affords in the dyspnœa occasioned by hydrothorax, or ascites, even in persons of the most advanced age, must place it in the first class of hydragogues, and I feel satisfied that the learned physician has amply carried into effect the object he had in view, "of alleviating human misery by explaining in what manner he had been enabled to give this formidable power a proper direction, and to render its use at once safe and efficacious."

The bad effects which have followed upon the administration of elaterium, have arisen from an injudicious employment of large doses, for which certainly every excuse is to be made from the discrepant opinions that are to be found as to its dose in the works of various authors. Of the ancient writers it is unnecessary for me to give their opinion of the quantity to be used, as the good sense of modern practitioners has long since taught that they are not guides in our present state of materia medica, however much they are to be reverenced on other points. Fernelius gave twenty grains of an extract, but of what nature cannot now be ascertained. Sydenham thus speaks, "Ela-

terium, or the fæces of the wild cucumber juice, operates powerfully in a small quantity, and carries off abundance of foul and watery humours; two grains of it is generally speaking a sufficient dose for most persons." Boerhaave mentions four grains, whilst Schultz gave to a boy of ten years of age five grains, and afterwards eight, without any mischievous effects. My own experience, and that of most of those who have used this remedy, would lead to the conclusion that the eighth of a grain of the extract as prepared for the English market, is quite sufficient to commence with, and many think it to be more prudent to commence with the lowest dose, which is one-sixteenth part of a grain; this may be repeated every four hours; the most judicious plan is to give at eight o'clock in the evening a pill containing the eighth part of a grain, to repeat it at ten o'clock, and then to allow the night to intervene before a similar quantity be administered, which should be about six in the morning. If the action does not commence upon the bowels before nine o'clock, another such dose may be taken. Should very active purgation be required the dose may be increased, and in some cases five or six grains may be taken in the course of the day without the production of much inconvenience. If too large a dose be commenced with, the nausea and the vomiting totally preclude the possibility of giving a fair estimate of the powers of the remedy, and wherever these occur, though watery stools and the increase of urinary evacuation may be very considerable, still all the beneficial effects will not be obtained, for the proper perseverance must necessarily be obstructed.

Elaterium, as the excellent authority I have quoted, Dr. Ferriar, justly observes, suffers a very extraordinary diminution of its powers, if it be repeatedly exhibited, and at last acts with very little more energy than would any of the cathartic medicines I have had occasion to speak of, but there is a fact well worthy your consideration and committal to memory, that you may again renew its power of action if, during a short period of intermission of its administration, you give castor oil, syrup of buckthorn occasionally, and likewise oxymel of colchicum, or acetate or syrup of squills; a combination, too, of hellebore, or of gamboge, has been highly extolled, but of this I must speak in a very hesitating manner, for this union may be and has been found much too active. Every individual who meets with success by the use of any particular drug, is naturally led to form the most sanguine expectations of its general efficacy, and few persons who do not for a time fall into almost an indiscriminate use of a favourite remedy; and at the first perusal of Dr. Ferriar's admirable paper contained in his "Medical Histories and Reflections," I was led to believe he had fallen into this unfortunate but by no means discreditable mistake, but on a careful comparison of his work with the opinions of other authors, on a careful and attentive perusal of the history of the comparison he had instituted by which he might appreciate the value of the different diuretics, and from the result of my own experience, based upon his views, I do not think that any remedy possesses such power as does elaterium for the complete removal of simple effusion, where no organic change has taken place in the structure of any of the internal viscera, and that it most materially alleviates the agonies which arise from hydrothorax, and from ascites, even in the advanced stages of an incurable disease.

For some very practical and useful observations on the employment of this remedy, I would refer you to a clinical lecture delivered by Dr. Billing at the London Hospital in the year 1832, and likewise to several cases of dropsy very well detailed by Dr. Anthony Todd Thomson, with observations on the relative value of different medicines, comprised in some lectures delivered by him in the year 1834. These are to be found in THE LANCET. The number of stools produced by this cathartic, their peculiarly fluid quality, and the decidedly salutary changes that rapidly supervene in all the secreting organs, particularly point out this remedy in cases of the most aggravated character of dropsy.

You will remember that I pointed out the value of digitalis where there was much laxity of fibre, where the constitution was broken down, where emaciation of the body is striking, where there is a pale skin which in the anasarcous limb seems to be transparent, when upon pressure by the finger on the surface there appears to be no elasticity, but the impression sinks deep, and there is no evident power of resistance,—in such cases elaterium affords much less prospect of cure although it does of relief. The constitution under these circumstances is seldom able to bear up against the evacuations, which are increased to an enormous extent. The strength of the patient ought to be such as may enable him to resist the powerful impression which is thus made. There must be no organic disease of the heart, no change of structure in the thoracic viscera impeding circulation or respiration. It is very serviceable when dropsy supervenes upon diseased states of the liver, where there are disordered states of the mucous membrane of the intestinal canal, indicated by the state of the tongue; you may draw your conclusion of the benefit likely to arise from the skin and from the tongue, where the former is harsh and dry, where it has a natural colour, where upon pressure the subjacent tissues exhibit great elasticity and resistance, where the tongue has a brown or even blackish surface, where there is no feverish whiteness, or patch of redness, you will ge-

nerally find it useful. Although it has, in doses not adapted for the patient, the habitude of producing vomiting, griping, and purging, such will not be the case with the due adjustment of your quantities. There will be a slight nausea, an unpleasant taste complained of for some time after it has been swallowed, and you will occasionally hear your patient say that he is conscious of some most disagreeable odour the nature of which he cannot quite explain. After a short time there will be a profuse exhalation from the mucous membrane of the intestines, several quarts will be poured forth, the stools will follow upon each other with the greatest rapidity; as long as there is any fluid to be carried away the griping is by no means severe, but when that is completely evacuated, if more have been taken than should suffice for the purpose, there will be considerable irritation and uncomfortable sensation; the lower part of the rectum sometimes suffers, but rather from the mere mechanical effect produced than from any power of the medicine, and a slight prolapse sometimes occurs.

The patient very rapidly recovers from the momentary weakness produced by this medicine; no bad effects are visible; the stomach does not lose its tone, but, on the contrary, the appetite is frequently voracious; thirst is seldom produced by it; the skin is oftentimes irritable for some days, and slight papulous eruptions, which itch very considerably, are sometimes consequent upon its use. It does not uniformly act upon the kidneys, but if any diuretic, such as squill or digitalis, be united with it, it then acts with some degree of energy upon these organs. The following formula has been strongly recommended in such cases:—A grain of the extract of elaterium, two ounces of the spirits of nitrous ether, of tincture of squills and of oxymel of colchicum, half an ounce, an ounce of the syrup of buckthorn; of this a spoonful three or four times a day, is the ordinary dose. Doubtless there are patients who are incapable of bearing the smallest doses of this remedy, in whom great disturbance of the stomach is excited, and who would not bear the forcible nature of the agent: such cases, of course, would be properly considered by you when they present themselves; but altogether I feel I am perfectly justified in recommending to you as a remedy in a disease of the most urgent nature that which, if it be not carelessly or indiscriminately prescribed, affords the most certain relief. I have not found that it requires that frequency of administration before its operation which is spoken of by some practitioners, who speak of the necessity of persevering in its use for eight or ten days, for the cases in which I have seen its powers they have been very quickly exhibited.

Elaterium has been recommended to check the course of fever in the dose of an eighth to a quarter of a grain, two or three times in the course of twenty-four hours; in this quantity it excites vomiting and purging, and thus fever is arrested in its progress; it has had its advocates in the cure of rheumatism, in diseases of the eyes dependent upon disordered states of the digestive organs, in tumours about the verge of the anus; but our information upon these points is limited, —a suppository made of two grains of elaterium rubbed up with eight grains of hard soap, has been spoken of as a suppository for the relief of apoplexy.

The great utility of elaterium in the cure of dropsy, when its dose is properly adjusted, and the uncertainty of this dose, led to an inquiry as to the mode of obtaining the extract of elaterium, and we are indebted to one of the most distinguished physicians of our day, Dr. Clutterbuck, for the series of experiments which he performed, and for some very valuable observations upon the points connected with this drug. Mr. Hennen and Dr. Paris have likewise devoted attention to the subject.

The momordica elaterium is mentioned by Gerarde as growing in this country about 1596. It is cultivated at Mitcham by Mr. Moore, for the London market, with very great care and attention, and the preparation from it made upon the spot. From the root, which resembles that of bryony, there issue several thick, round, rough, and trailing stems, divided into many branches extending every way three or four feet, and destitute of tendrils, the leaves are heart-shaped, rough, of a grayish-green colour above, and somewhat paler beneath; these stand upon long footstalks. The flowers are axillary, of a straw-yellow colour, and are both male and female on the same plant, the male flowers are upon short peduncles, the females on the germen; the corolla is divided into five acute segments, reticulated with green veins; the filaments are inserted into the base of the corolla, bearing orange-coloured anthers; the style is three-cleft, terminated by an oblong stigma. The fruit is of a coriaceous texture, of a grayish colour, and closely set with short bristles. The seeds when ripe are black. When ripe the fruit bursts and throws out with considerable violence the juice and the seeds, through the hole at the insertion of the footstalk. From the circumstance of the capsule thus dehiscing and emitting its contents to a very great distance, it has obtained the common name of the squirting cucumber. One of the causes of the inactivity of elaterium formerly was, that instead of the cucumber being prepared on the spot on which it grew, it was sent in carts or in different vehicles to the place where it was to be operated on, and on the way the shaking and the different changes it had to undergo in lading and unlading, caused the pepo

to burst, and thus was thrown away that portion on which its energy was to depend. The uncertainty of the different samples is now obviated, and the cucumber is generally submitted to pressure on the day it is gathered, and the gathering takes place as soon as the ripeness of the capsule is ascertained, by the bursting which occurs towards the evening of the day in the early part of the month of September.

Great caution is necessary to be observed by those who are employed for the gathering in of the elaterium, for both purging and severe inflammation of the hands and arms occur, more particularly if the skin be at all abraded. Not long since some persons in the employment of the Society of Apothecaries were very severe sufferers from their not being aware of this circumstance.

The extract is thus to be made in compliance with the ordonnance of the College of Physicians:—"Slice the ripe pepos of elaterium, express the juice very gently, and pass it through a very fine hair sieve, then set it aside for some hours until the thicker part has subsided. Reject the thinner supernatant part and dry the thicker with a gentle heat." This, it has been observed, is rather a modification of fecula combined with the active principle of the fruit, than an extract.

Dr. Clutterbuck observes that the most active principle belonging to this plant is neither lodged in the root, leaves, flowers, nor stalks, in any considerable quantity, nor is it to be found in the body of the fruit itself, nor in the seeds contained within it. It was only in the juice around the seeds, therefore, that it could be looked for, and there the trials that were made proved it to exist. The juice, Dr. Clutterbuck goes on to say, as it first issues without pressure, is perfectly limpid and colourless, and after some hours it slightly deposits a sediment, which being collected and gently dried without much exposure to light, is of a yellowish-white colour, slightly tinged with green; when dried it is very light and pulverulent. This is the real elaterium, and it is extremely active as a medicine, an eighth part of a grain seldom failing to purge violently, and often with vomiting previously. The quantity contained in the cucumber is exceedingly small; from forty cucumbers Dr. Clutterbuck only obtained six grains; so that a single cucumber contains about an ordinary dose. Much of that which is met with in the shops is of a dark green colour, approaching to black; it is likewise compact and heavy, and breaks with a shining resinous fracture. This is usually prepared by a strong pressure of the cucumber, and consists, of course, in great part of the ordinary juices as well as the elaterium. It is uncertain in its operation, and very weak in comparison to that which has been properly prepared. In the elaterium exists a peculiar principle to which Dr. Paris has given the name of elatin; but this it would seem, upon examination, is a compound body. Marquart has given a process for separating the alkaloid. The nearly ripe fruit is to be collected in July, pressed, and then the juice evaporated to the consistence of extract. This is then to be digested with alcohol of 90 per cent., the latter distilled off, and the residue agitated in boiling water, in which after cooling, the crystals of elaterine are observed covered with chlorophylle. The solid matter is to be separated from the fluid first, collected upon a filter, and separated from chlorophylle by dropping ether upon it; a colourless, crystalline, almost tasteless powder remains, which by distillation leaves a product containing ammonia. It is insoluble in water, very soluble in alcohol. It is quite neutral, scarcely soluble in ether, little soluble in cold, very soluble in hot oil of turpentine, from which it does not separate on cooling. The activity of this preparation is very striking, indeed great danger has been apprehended from any attempt to give it medicinally. Dr. Christison observes of elaterine, "it is a poison of very great activity; a tenth of a grain, as I myself have witnessed, will sometimes cause purging in man, and a fifth of a grain in two doses, administered to a rabbit, killed it in seventeen minutes after the second dose. The best British elaterium contains twenty-six parts of this active principle, the worst fifteen per cent., but French elaterium does not contain above five or six parts. Hence we may account for the different quantities that have been administered.

It has been employed externally, and an expressed juice has obtained reputation as a local application to dispel œdema, and boiled with vinegar to cure gout. In the older authors two kinds of elaterium are spoken of, the black and the white; this seems to depend upon the pressure made, and Dr. Clutterbuck has more particularly pointed out the appearance of these two preparations. As an errhine this extract was occasionally used in cephalalgia, in affections of the eyes, but has now completely fallen into disuse. Elaterium of a very inferior quality to that which is used here, is often brought into the market from the Continent; a good deal comes from Malta, but it is easily distinguishable from its darkness, and from its greater weight, and by its possessing much more odour; it is sent, too, to Constantinople, and it would appear to be one of the medicinal agents used by the Turks.

ALOES.

This family of plants belongs to the natural order of the liliaceæ, and embraces about fifty species, which are inhabitants of the warmer parts of the three older divisions of the globe; they have almost all leaves, which are fleshy, succulent, and armed with spines at their edges. It would appear that

they would all yield that extract to which the name of aloes has been given, but some of them are more particularly distinguished. The three most important varieties of aloes are known, commercially, under the names of socotorine, of hepatic, or Barbadoes, and of caballine. Still there are different sorts which obtain their name from the countries in which the juice is collected, and we hear of the aloes of India, of the Cape, of Mozambique, of Barbadoes, of Mocha; and we hear of an aloe which is a simple exudation produced by the heat of the sun. In a very recent number of the "Transactions of the Royal Geographical Society," we have an account, from Lieut. Welstead, who visited the Island of Socotra, of some facts which are interesting to us. He observes, that among the few natural productions of importance which are found in Socotra, the first rank is due to the aloe spicata, or socotrina, called, in the language of the island, tayef, and by the Arabs, soobah. For this plant the island has been famous from the earliest period. It is found growing spontaneously on the sides and summits of the limestone mountains, at an elevation of from 500 to 3000 feet above the level of the plains. The plants appear only to thrive in parched and barren places; its leaves are plucked at any period, and after being placed in a skin the juice is suffered to exude from them. In this state they are brought into Tarmarida and Colosseah, whence they are mostly shipped for Muscat, where their price varies very considerably. In 1833, the best sold for one rupee (30d.), the Bengal seer, nearly an English pound; while of the more indifferent, four seers might be procured for a dollar. The socotrine aloes, when pure, are the finest in the world, but owing to the careless manner in which they are gathered and packed, they contract many impurities, and their value becomes proportionately deteriorated. Formerly every part of the island produced the aloe, and the whole was farmed out to different individuals, the produce being monopolised at a fixed price by the Sultan. At present any one collects the aloe leaves who chooses to take the trouble, and nothing is levied on account of the Sultan.

The plant is perennial, flowering in winter and in spring; the stem rises to the height of three or four feet; the leaves are numerous, about two feet long, broad at the base, tapering gradually to a point, thick, fleshy, succulent, armed at the edge with whitish horney teeth. The flowers are produced in terminal spikes of a purple or reddish colour; each flower is furnished with a single white bract; the perianth is bell-shaped, and divided into six narrow segments; the three inner lobes are white, with three green lines; the outer ones narrower, and lips concave; the filaments are six, yellowish, furnished with oblong orange-coloured anthers; the germen is oblong, with a simple slender style, and an obtuse single style; it has vegetated in this country in hot houses. The representation given in Stephenson and Churchill's Medical Botany is taken from a fine specimen which blossomed in April, 1829, in the garden of Mr. Haworth, a Fellow of the Linnæan Society, at Queen's Elm, Chelsea.

The plant is likewise found growing to great perfection in different parts of Africa, more particularly in the kingdom of Melander, from whence is obtained a very large proportion of the aloes called socotorine, or Cape aloes. It comes in chests and casks, and I have heard drug merchants state that they not unfrequently have found large stones, and refuse of various kinds, which have been purposely added to increase the weight of the package. It is in solid, heavy, brittle fragments, reddish-yellow; it has a glossy or shining appearance, and breaks with a smooth conchoidal fracture; small pieces have, at their edges, a golden yellow tinge. The odour is very peculiar, and has been compared to the russet apple when decaying; the aroma is very much developed by breathing upon it; the superior sort has a more fœtid and disagreeable smell; the taste is intensely bitter, and hence aloes has been called Nature's vegetable gall. It is not difficult to distinguish the aloes that come from Socotra from that which more immediately is sent from the Cape, for its odour is more agreeable, its colour is more golden, and there is a more glossy appearance. The general opinion seems, too, to be, that the socotorine aloes is much milder in its operation. When pulverised, it exhibits a much more lively yellow colour, not quite so bright as gamboge, but approaching to it in its hues. Tromsdorff's analysis gives twenty-five parts of resin and seventy-five of a saponaceous extractive matter, soluble both in alcohol and in water; a slight trace of gallic acid is also perceptible. This saponaceous extract has a most intense bitterness, and an odour which he compares to that of saffron. The resinous matter is not very bitter, and possesses but feeble power as a purgative. Bouillon Lagrange, and Vogel, found that it contained forty-two parts of resin and fifty-eight of extractive matter. The Mocha aloes appears to be only the socotorine aloes in a higher state of perfection; at least such is the opinion of some of the German druggists. Some beautiful specimens of this variety were exhibited, together with one of the finest collections of all the different sorts of aloes, at the meeting of the Inquirers into Nature, which took place at Stuttgard, in the year 1834. Jobst, on that occasion, threw open his drug establishment for general inspection, in which were gathered together the produce of every region of the globe which has been found at all adapted for medical

purposes. His collection was exceedingly rich in all those treasures which the materia medica and pharmaceutical chemistry boast, but nothing excited such universal attention as the specimens of aloes, all of which were preserved in the same form in which they were imported. The Barbadoes, the Cape, the Hepatic, the Mocha, and the Egyptian aloes were all of the best quality. The only one that was absent was that which was formerly known as aloes from the Island of Elba, which it would seem came in the way of trade from the Grecian Archipelago, but which has ceased to be an article of commerce; some have stated it to be that which is occasionally met with under the name of red aloes, which is more in the form of scale.

The hepatic aloes, called also the Barbadoes, is now pretty generally understood to be the concrete juice of the leaves of the aloes vulgaris, a native of the Levant and of Barbary; this is the αλοη of the Greeks. Dr. Sibthorpe found it growing spontaneously in the island of Cyprus; it was at one time believed to be the aloes perfoliata; the stem abounds in a clammy, fœtid, yellowish juice, as does the greater part of the plant; the leaves are about four inches broad, at their base a foot long, lanceolate, fleshy, smooth, succulent, concave, above of a sea-green colour, and, when young, spotted with white; the flowers form a slender, smooth spike of a bright yellow colour; it is the only species of which the flowers are of a yellow colour; the flowers are numerous, spreading horizontally in an elegant spike. It is cultivated at Barbadoes on lands near the sea which are thought not capable of supporting the sugar-cane; the soil is ploughed lightly, and weeds are carefully removed; the young plants are set like cabbages, about five or six inches from each other in regular lines; it is generally about April or June that this takes place, and in the March following the labourers carry a parcel of tubs and jars into the field, and each takes under his management a portion of the land; he lays hold of a bunch of the leaves, or blades, he cuts it just above the surface of the earth as quickly as possible that the juice may not be wasted, and then places the blades in the tub; when the first tub is thus packed quite full, a second is begun, each labourer having two, and by the time the second is full all the juice is generally drained out of the blades in the first tub; the juice of the aloe will keep for several weeks without injury, it is, therefore, not boiled till a sufficient quantity is procured to make it an object for the boiling house. In the large way three boilers, either of iron or of copper, are placed to one fire, though some have but two, others one; the boilers are filled with juice, and as it becomes more inspissated by a constant but regular fire, it is ladled forward from boiler to boiler, and fresh juice is added to that farthest from the fire, till the juice nearest the fire becomes of a proper consistence to be shipped or ladled out into gourds or other small vessels for its reception; the proper time to ladle it out is when it has arrived at what is called a resin height, or when it cuts freely, or drops in thin flakes. For this information we are indebted to Mr. Millington in a communication made to the editors of the "Medical Journal."

Neither the odour nor the taste of the Barbadoes aloes agree with the qualities exhibited by the socotorine; of these the first is much more strikingly offensive, whilst the taste is decidedly much more nauseous; the pieces want the shining vitreous fracture; they are more plastic and adhesive to the hand, and, when reduced to powder, it is of a dull brown colour.

The operation of the different varieties of aloes upon the system, though differing in intensity, is precisely similar as to its nature; although they are all perfectly soluble in fluids, whether of an aqueous or of a spirituous kind, they do not seem so immediately to be dissolved in the human stomach, and hence the slowness of their operation, generally speaking twelve or sixteen hours elapsing before their effect is decidedly exhibited. It has been, and is still an interesting question upon what viscus does aloes more immediately act? Whilst some confine its power to the rectum, others believe its agency to be upon the liver; by some it is not believed to be entirely dissolved until it has reached the receptacle of the residue of the ingesta, which cannot be incorporated into the system. Its influence upon the liver is certainly marked by the peculiar condition of the evacuation, which shows evidently both by its colour, by its odour, by the peculiar pungent effect upon the anus, that an increased quantity of bile has been poured forth. That it acts upon the vena portarum is fairly to be deduced from the very peculiar state into which the hæmorrhoidal veins are thrown by the congestions which so rapidly occur after a dose of this drug has been taken, and also by the condition of the uterine vessels which has led to its employment as an emmenagogue. It is not easy to ascertain whether this specific influence upon the venous system is the cause of the cathartic power possessed by it; we find, however, that some connection exists, and that the more the large intestine is stimulated to pour forth its contents by its action, not by the largeness of its dose, the greater is the relief afforded to the sanguiferous system; hence its great value in determination of blood to the head, in venous congestions, and its superiority over medicines of somewhat a similar nature, and hence, too, the caution necessary in its administration. The slowness of its action renders it sometimes to us of much importance, from our

power of giving it in some states in which it is to be given at night, and its operation is not required until the morning; the smallness of the volume in which it may be used, the shape of pill into which it is so easily made, and which disguises so well its bitterness, are all of them subjects worthy our consideration.

From the circumstance of the alkalies and the carbonates rendering it more soluble, it is often combined with them, and we are hence furnished with weapons which, used with skill and care, enable us more certainly to combat disease. Thus, with soap, although we may diminish its intensity of action, we render it more quickly purgative. If, with Dr. Hamilton, we cannot quite agree that it is almost a universal remedy, that the most formidable maladies will yield to its effects, still it is to be acknowledged that in a vast number of chronic disorders it is invaluable; that in the obstinate constipation to which the artist, the student, the aged, and the sedentary are subject, from inactivity of the liver and of the sanguiferous system, it is, under the control of the skilful medical man, a drug which deserves the highest commendation; and though from its abuse in the vast number of quack medicines and patent pills, it has been the source of mischief, and has been occasionally condemned, we possess nothing that we could substitute for it that has more claims to our considerate and careful examination.

CASE EXHIBITING CERTAIN CONSEQUENCES RESULTING FROM

IRREGULAR ACTION OF THE HEART

CAUSED BY PERICARDITIS.

To the Editor of THE LANCET.

SIR:—Should you consider the following case possessed of sufficient interest to merit a place in your valuable Journal, I will feel much obliged by its insertion. I am, Sir, your most obedient servant,

R. U. CASHMAN, M.D., L.R.C.S.I.

Cloyne, Ireland, July 13, 1838.

October 27, 1837, John Browne, aged 23, a farmer's servant, of stout make, and sanguine temperament, states that about twelve months ago he had been confined to bed with pains in the joints of his legs and arms, headach, loss of appetite, and other febrile symptoms, caused by sleeping under the night air; that after a time he obtained some relief, still suffering, though not severely, from the pains in the joint, until about a fortnight ago, when in consequence of a repetition of the original cause, his complaints were considerably aggravated, again confining him to bed, where he has remained until the present, not having had any medical advice either for this or the former attack. On visiting him this day, for the first time, his countenance strongly attracted my attention, it was peculiarly expressive of pain and anxiety, his lips trembling, and perspiration running down his face; on questioning him as to the seat of pain, he laid his hand on the region of the heart, saying "that it was the principal cause of his sufferings;" he also complained of severe pain in the joints, but the former was particularly referred to during the paroxysms, which attacked him once or twice a day in the following manner. They came on with a general tremor of all the muscles, he lay perfectly insensible to all external objects, the eyelids rapidly moving up and down, perspiration flowed freely from all parts of the body, respiration quick and panting, pulse ranging from 110 to 120, small and irregular. After the lapse of about five minutes, the tremors cease, the limbs become quite motionless and relaxed; the action of the eyelids (which remain half open) cease, the eyes assume a fixed vacant gaze. Respiration becomes remarkably slow and stertorous; pulse still quick and small; the linen quite saturated with perspiration. After a period of about fifteen minutes from the commencement of the paroxysm he gradually regains his faculties, recognising his attendants like a person recovering from a state of syncope, and making efforts to speak before he has the power of doing so, the ideas being evidently in his mind though he cannot express them, not having regained a sufficient influence over the muscles of articulation. Appetite has been very indifferent for some time, tongue natural, skin dotted over with a great number of petechiæ, possessing the characters of those of purpura; he could not tell what was the duration of this symptom, as he did not observe it until I drew his attention to it. Gums appear soft and spongy; says that he bleeds occasionally from the mouth and nose, also that he passed blood per anum. To live on light farinaceous diet. Twelve leeches to the precordial region. Colchicum draught immediately.

28. Slept indifferently; complains of great lassitude and debility, suffering severely from the pains about the heart and joints; had two paroxysms since last visit. Repeat leeches and draught.

8 o'clock, P.M. Sent for in a great hurry to see him, the messenger giving me to understand that he was dying. On inquiry, it appeared that he had got into one of his usual fits, and that having continued in it longer than on former occasions, his friends became alarmed and sent for me; I found him in the following state:—Extremities quite cold; respiration very slow and labouring; grinding of the teeth, (a symptom which I did not observe before, though his attendants frequently did); in other respects the same as described during a former paroxysm.—

Ordered to take some warm wine; frictions with hot flannel to the surface, and bottles of hot water to the feet. By perseverance in these measures he was gradually roused from this state, appearing much more exhausted than usual. Tincture of opium 30 drops immediately; to have recourse to the wine and frictions should he fall into the same state again.

29. No recurrence of the fit since; slept tolerably; his sufferings much increased, particularly the pain in the region of the heart; pulse 97; quick, with an occasional intermission. Twenty leeches to the left side; the colchicum draught immediately.

31. Great debility; petechiæ more numerous; has had some bleeding from the gums; pulse 100, quick and irregular; bowels freely evacuated by means of the colchicum. Owing to the general state of the system I did not deem it prudent to repeat the leeches (which always bleed very freely and for a considerable time), though anxious to do so, being strongly impressed that there was inflammation of the pericardium still unsubdued. I therefore had recourse to counter-irritation by means of blisters or tartar emetic ointment, still continuing the colchicum as a purgative.

Nov. 3. Debility still very alarming; have remarked that during the last few days the paroxysms occurred periodically night and morning. Says he does not suffer so much during their continuance as formerly, though they last equally as long, and maintain all the characters as before described. Four grains of sulphate of quinine with 20 drops of sulphuric acid every night; the colchicum draught every second day; blister to be dressed with savine ointment.

7. After taking the quinine for a few days the fits did not occur so regularly, which I attributed to its use; under this impression I continued its exhibition regularly with the colchicum and counter-irritation. Under this treatment he experienced a decided improvement; it was, therefore, followed up for sometime modified according to circumstances, and he still continued to improve, gradually regaining his strength; the paroxysms neither attacking him so often nor continuing so long, being more free from pain than he had been for several months previously, but his health was not sufficiently restored so as to enable him to resume his arduous employment for nearly three months subsequently.

On reviewing the foregoing symptoms, and considering the history of the case, I am inclined to attribute the cause of the affection for which I was consulted, to inflammation of the pericardium transferred from the extremities to this membrane; and I am also of opinion that the paroxysms which attacked him generally twice a day, were induced by irregular action of the heart caused by inflammation of its investing membrane; that the acute stage of inflammation had subsided when the quinine was administered, I am inclined to infer from the beneficial effects which attended its use at this stage of the disease; invigorating remedies were indicated, and might they not have acted by giving tone to the system generally, and thence enable the heart to perform its proper function with due regularity? That there was a hæmorrhagic tendency was very apparent from the numerous petechiæ before alluded to, and also from the fact that whenever there was a breach of surface, it was with considerable difficulty the oozing of the blood could be restrained. Was this state the consequence of deranged function of the centre of the circulation, or was it mere coincidence? I cannot answer the question, but I observed the fact that according as the inflammatory symptoms subsided, the petechiæ on the body diminished and finally disappeared altogether.

STRAPPING THE HEAD IN CHRONIC HYDROCEPHALUS.

To the Editor of THE LANCET.

SIR:—I see, by one of your July Numbers, that Dr. Engelmann has been trying my plan of strapping the head for the cure of chronic hydrocephalus, with success, in Germany. It is now nearly fifteen years since I published my two first cases, in the "Medical Repository," one of which was copied into your first volume, and it has certainly rather surprised me that it has not been tried by any English practitioner since that time; at least, I have seen no published case; but I suppose it was in consequence of the more brilliant plan by Dr. Conquest having been soon after submitted to the public. However, rather than run a trocar into the brains of my patients, with the uncertain success even of Dr. Conquest himself, I have preferred adhering to my own plan, and that with invariable success in all cases wherein it was applicable; and I have taken care not to use it where the chances of a successful issue were but slight. I hope, that the publication of Dr. Engelmann's cases will induce some of our own medical men to give the plan a trial. I should be happy to supply every information derived from my own experience. I am, Sir, yours &c. J. F. BARNARD.

Bath, August 5, 1838.

*** Our correspondent has mainly to blame himself for the neglect into which his practice has fallen. If, as Mr. Barnard says, "he has employed the practice of bandaging with invariable success in all cases wherein it was applicable," he should place those cases upon record, and we will feel much pleasure in affording him the best means of giving them publicity.

ON THE

MORTALITY AND FREQUENCY OF DISEASE AMONGST CHILDREN.

BY PETER HENNIS GREEN, M.B.

THE want of an hospital for the reception of sick children in this country has rendered it impossible to collect any statistical data, on an extensive scale, relative to the frequency, mortality, &c., of the different affections to which children are subject. Even on the Continent, where hospitals for children abound, but few statistical documents, from which satisfactory information can be derived, have been published. I have, therefore, been induced, at the suggestion of Mr. Wm. Farr, to draw up the following tables, derived from a portion of the notes which I accumulated while attending the Hôpital des Enfans Malades, at Paris. The accuracy of the tables, in which the relative frequency of the various diseases is pointed out, may be relied on with the utmost confidence, because a name was never given to any disease until either after the post-mortem examination of the patient, or during the course of the malady, after repeated and careful examination. The tables are not derived from hospital records of entries, &c., but from personal observations made, in conjunction with my friend the late Dr. Constant, for the purpose of collecting an extensive series of statistical facts relative to diseases of children: the premature death of M. Constant interrupted the execution of our plan. It is right to remark, that the tables do not comprehend children under twelve months of age, as they are excluded from the Hôpital des Enfans; and that the mortality represents the ratio of deaths in hospital practice, not that which may be supposed to occur throughout the whole series of individuals attacked by a particular disease.

The researches which I made with Dr. Constant were continued throughout the years 1833 and 1834, in the division of the hospital set apart for "acute diseases." The statistics of the boys' wards were noted in 1833; of the girls', in 1834; in addition to which I possess an account of the general "movement" of the hospital during four years. To avoid tediousness, however, I shall, at present, give the general summary of the year 1834 alone.

General Table of Entries and Deaths for 1834.

Months.	Treated.		Deaths.	
	Boys.	Girls.	Boys.	Girls.
January	166	151	19	36
February	145	124	29	33
March	146	124	26	30
April	145	109	23	29
May	148	135	21	20
June	144	118	13	15
July	136	95	23	12
August	135	104	12	8
September	127	95	21	16
October	112	111	17	14
November	103	100	17	12
December	116	111	24	17
Total	1623	1377	245	242

The above table includes the whole of the admissions into the hospital, during the year 1834, under the following divisions, viz., "acute diseases;" "ophthalmia and dartres," "scrofula," "tinea capitis," "surgical diseases," and "scabies,"

The general mortality was about one in six of all the patients admitted; the mortality of the boys was 15.095 per cent.; that of the girls was 17.575 per cent.

The following table (table 2) indicates the mortality according to age, and serves to confirm the well known rule, "that disease is fatal in proportion to the youth of the patient." Thus, between the ages of 2 and 4, the deaths were to the "treated," as 1 to 2.773 from 4 to 6, as 1 to 4.062; from 6 to 10, as 1 to 7.325; and from 10 to 15, as 1 to 11.517.

TABLE 2.—1834.

Age.	Treated.		Died.	
	Boys.	Girls.	Boys.	Girls.
2 to 4 years.....	236	205	85	74
4 to 6 years.....	194	196	50	46
6 to 10 years.....	462	417	56	64
10 to 15 years.....	731	559	54	58
Total.....	1623	1377	245	242

The tables *a*, *b*, *c*, *d*, *e*, and *f*, show the mortality under the several divisions, acute diseases, ophthalmia and dartres, scabies, scrofula, tinea capitis, and surgical diseases.

Table a.—ACUTE DISEASES.—Treated:—Boys, 608; Girls, 593. Died:—Boys, 180; Girls, 197. 377 deaths in 1201 cases treated, being a mortality of 31.4 per cent.

Table b.—OPHTHALMIA AND DARTRES.—Treated:—Boys, 322; Girls, 269; Total, 591. Died:—Boys, 25; Girls, 8; Total, 32; being a mortality of one in 18½.

Table c.—SCROFULA.—Treated:—Boys, 77; Girls, 47; Total, 124. Died:—Boys, 16; Girls, 23; Total, 39; or, one in 3¼.

Table d.—TINEA CAPITIS.—Treated:—Boys, 113; Girls, 83; Total, 196. Died:—Boys, 7; Girls, 0; Total, 7; or, one in 28.

Table e.—SURGICAL DISEASES.—Treated:—Boys, 250; Girls, 131; Total, 381. Died:—Boys, 17; Girls, 14; Total, 31; or, one in 12 3-10ths.

Table f.—SCABIES.—Treated:—Boys, 253; Girls, 254; Total, 507. Died:—Boys, 0; Girls, 0. Total, 0.

An examination of some of the above tables will prove the necessity, to which allusion has already been made, of distinguishing "hospital" from "ordinary" mortality. Thus, if 32 out of 591 patients affected with ophthalmia and common cutaneous affections (impetigo, &c.) died, we can only regard this fact as determining the chances which the children incurred of being exposed to, or affected with, the contagious diseases necessarily prevalent in the hospital. The same remark applies to the "scald head" patients; one died of hydrocephalus, the rest of measles or pneumonia.

If we consult those writers who have treated of the relative frequency of certain affections, at different times of life, we shall find that they have laid it down, almost as an "axiom," that diseases of the nervous system are most prevalent in childhood; diseases of the chest amongst adults; and disease of the abdominal viscera most prevalent in persons of advanced life.* A glance at the following tables will at once demonstrate the error of such an opinion. If diseases of the respiratory system be more frequent in the adult, they are also more frequent in the child. Thus, out of a given number of cases observed during the years 1833-4, there were 136 examples of disease of the nervous system; 289 of the digestive organs; and not less than 421 of the respiratory system. Several other reflections are suggested by even a cursory view of the documents which I now present, but the fear of occupying too much space prevents me from developing them at any length.

In compliance with the prevailing theories of the French school, I have inserted the cases of diarrhœa under the head "enteritis," and placed typhus fever amongst diseases of the digestive organs. It is easy, however, to remove the latter to "diseases of the circulating system," and as for diarrhœa, when of long standing, it almost invariably terminated in enteritis.

The most prominent points indicated by the following table (A) are the frequency and fatality of acute and chronic enteritis; the mortality caused by tubercular peritonitis, which is almost as fatal a disease as tubercular meningitis; the rarity of *simple* peritoneal inflammation in the child, one case only having been observed in 1260.

* The above sentence had been scarcely written when a pamphlet was placed in my hands, in which I find the following passage:—"It has been calculated that four-fifths of those who die in infancy fall victims to head diseases or convulsions."

TABLE A.—*Diseases of the Digestive Organs.*—1833-4.

Disease.	Entered.		Died.		Cured.		Not Cured.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Stomatitis	6	8	0	0	6	8	—	—
Gangrena oris	10	4	8	4	2	0	—	—
Angina Inflammatory	8	.....	0	.....	8	.....	0	—
Angina Membranous	2	.....	0	.....	2	.....	0	—
Angina Gangrenous	1	.....	0	.....	1	.....	0	—
Angina	.....	19	.....	1	.....	18	—	—
Œsophagitis	1	.....	0	.....	1	—	—	—
Functional Derangement of the Intestines	4	5	0	0	4	5	—	—
Gastralgia	2	2	0	0	2	2	0	—
Gastritis	7	6	2	.....	5	6	0	—
Indigestion	4	.....	0	.....	4	.....	0	—
Gastro-Enteritis	9	14	2	5	7	9	0	—
Acute Enteritis	32	32	8	8	24	22	0	2
Chronic Enteritis	9	11	2	2	3	3	4	6
Typhus Fever (Dothinenteritis)	16	13	6	4	10	9	0	—
Cholera Asiatica	8	.....	5	.....	3	—	—	—
—— Sporadica	.....	1	.....	.....	.....	1	—	—
Cholerine	.....	27	.....	.....	.....	27	—	—
Colica Pictonum	2	.....	0	.....	2	.....	0	—
Dysentery	2	.....	0	.....	2	.....	0	—
Tubercular Peritonitis	9	11	8	8	0	1	1	2
Simple Peritonitis	.....	1	.....	.....	.....	1	—	—
Tænia	.....	3	.....	.....	.....	3	—	—
Total	132	137	41	32	86	115	5	10

TABLE B.—*Diseases of the Respiratory Organs.*—1833-4.

Disease.	Entered.		Died.		Cured.		Not Cured.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Laryngitis	2	4	1	1	1	3	0	—
Croup	1	..	1	..	0	..	0	—
Acute Bronchitis	48	45	0	..	43	42	5	3
Chronic Ditto	19	5	1	0	7	3	11	2
Influenza	19	0	0	0	18	0	1	0
Pneumonia	84	31	38	12	42	19	4	0
Hæmoptysis	2	0	0	0	2	0	0	0
Pulmonary Apoplexy	1	0	1	0	0	0	0	0
Gangrene of Lung	2	0	2	0	0	0	0	0
Phthisis	44	38	38	36	0	0	6	2
Pleurisy	14	9	2	0	11	9	1	0
Hooping Cough	27	26	14	6	11	16	2	4
Total	263	158	98	55	135	92	30	11

Table (B) indicates a truth which cannot be too often impressed on the minds of those to whom the care of children is entrusted, viz., that pneumonia is by far the most frequent of infantile diseases; next to pneumonia we find bronchitis, and after bronchitis comes pulmonary consumption. The term phthisis is here confined to children dying with cavernous excavations, or with softened tubercles, accompanied by the usual symptoms of phthisis. Many of the patients who died of pneumonia were also affected with tuber-

cles in the lungs; but so also were many children cut off by other diseases. I think that I should not overstate the proportion in saying, that 2-5ths of the children who die at the hospital present traces of tubercular deposit in some one organ or organs.

TABLE C.—*Circulating System.*—1833-4.

Disease.	Entered.		Died.		Cured.		Not Cured.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Hypertrophy of the Heart	2	1	0	.....	0	.....	2	1
Pericarditis	1	3	1	3	0	0	0	—
Phlebitis	2	.....	2	.....	0	.....	0	—
Anemia	4	.....	3	.....	0	.....	1	—
Chlorosis	.....	1	—	—	—	—	—	1
Purpura Hæmorrhagica..	2	1	1	1	1	—	—	—
Cyanosis	1	.....	1	.....	0	—	0	—
Infantile Fever.....	1	.....	0	.....	1	—	0	—
Intermittent Fever	11	7	1	0	10	7	0	—
Hectic Fever.....	1	.....	1	.....	0	—	0	—
Inflammatory Fever	4	.....	0	.....	4	—	0	—
Total.....	29	13	10	4	16	7	3	2

TABLE D.—*Nervous System*, 1833-4.

Disease.	Entered.		Died.		Cured.		Not Cured.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Cerebral Congestion	8	4	0	0	8	4	0	—
Encephalitis.....	1	1	0	1	1	..	0	—
Meningo-Cephalitis	1	0	1	.....	0	0	0	—
Acute Meningitis	3	15	3	.....	0	0	0	—
Tubercular Meningitis ..	9		9	15	0	0	0	0
Acute Hydrocephalus....	1	.....	1	.....	0	..	0	—
Chronic Ditto	1	3	1	2	0	0	0	1
Myelitis.....	.....	2	.....	2	—	0	—	—
Apoplexy	1	.....	0	.....	1	..	0	—
Hypertrophy of Brain....	1	.....	1	.....	0	..	0	—
Cancer of Brain	1	.....	1	.....	0	..	0	—
Tubercles of Cerebrum ..	3	2	3	2	0	0	0	—
Ditto.. of Cerebellum	4	3	4	.....	0	0	0	—
Ditto.. of Pons Varolii	1		1	3	0	0	0	—
Chorea	11	30	0	0	7	27	4	3
Neuralgia Facialis	.....	2	.....	.....	.....	2	—	—
Convulsions	2	4	0	1	2	2	0	1
Epilepsy	3	6	0	1	1	5	2	—
Hysteria	.....	2	.....	.....	.....	2	—	—
Contracture of Limbs....	3	1	1	.....	2	.....	0	1
Paralysis	1	.....	0	.....	1	.....	0	—
Idiotcy	2	4	0	.....	0	.....	2	4
Total.....	57	79	26	27	23	42	8	10

The mortality of cerebral diseases in children is dreadfully depicted in the above table. If we subtract cerebral congestion, only two cases of recovery in 53. Tubercles of the brain occurred more frequently than is indicated by the table, because several of the cases of meningitis also presented examples of tubercles of the nervous centres. Those registered were cases of tubercle without meningitis. The table also indicates the frequency of chorea, much greater in females than in males.

TABLE E.—*Diseases of the Secretory Organs.*—1833-4.

Diseases.	Entered.		Died.		Cured.		Not Cured.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls	Boys.	Girls.
Hypertrophy of Liver....	1	.....	0	.....	1	.....	0	—
Abscess of Ditto.....	1	.....	1	.....	0	.....	0	—
Disease of Ditto	.....	1	.....	.....	.....	1	—	—
Jaundice	3	1	0	1	2	.....	1	—
Nephritis	1	1	0	.....	1	1	0	—
Bright's Disease	3	4	2	3	0	1	1	—
Leucorrhœa	.....	6	.....	.....	.....	6	—	—
Anasarca	6	10	1	2	4	6	1	2
Total.....	15	23	4	6	8	15	3	2

TABLE F.—*Organs of Sense.*—1833-4.

Disease.	Entered.		Died.		Cured.		Not Cured.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Amaurosis.....	2	.....	.....	.....	.....	.....	2	—
Ophthalmia	6	1	0	.....	5	1	1	—
Otorrhœa.....	5	3	0	.....	4	3	1	—
Coryza	2	.....	0	.....	2	.....	0	—
Erysipelas of Face	8	7	0	1	8	6	0	—
Skin-bound	.....	1	.....	1	—	—	—	—
Scarlatina.....	16	23	5	6	11	17	0	—
Measles.....	59	39	12	10	47	29	0	—
Roseola.....	1	.....	0	.....	1	.....	0	—
Small-pox.....	50	43	20	15	28	28	2	—
Varioloide.....	8	8	0	.....	8	8	0	—
Varicella	2	2	0	.....	2	2	0	—
Urticaria	5	1	0	.....	5	1	0	—
Purp. Hæmorrhagica....	.....	1	.....	.....	.....	1	0	—
Zona	2	.....	0	.....	2	.....	0	—
Erythema Nodosum	.....	4	.....	.....	.....	4	—	—
Total.....	166	133	37	33	123	100	6	—

Eruptive diseases have been enumerated under the head "organs of sense," merely to avoid multiplying the tables too far. The mortality of those diseases is very high at the Hôpital des Enfans Malades, being nearly as 1 to 3½ for small-pox, measles, and scarlatina, taken together. This mortality is, in a great measure, caused by the occurrence of pneumonia during the stage of convalescence.

TABLE G.—*Organs of Locomotion.*—1833-4.

Diseases.	Entered.		Died.		Cured.		Not Cured.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Rheumatism.....	16	9	2	.....	13	9	1	—
Rickets.....	2	1	0	.....	0	1	2	—
Caries of the Spine	3	4	1	2	0	.....	2	2
Total.....	21	14	3	2	13	10	5	2
General Total	683	577	219	159	403	380	58	28

I was desirous of comparing the above tables with similar ones drawn up by the late Professor Dugés, in the year 1818, but I find that I must defer my project to a future opportunity.

THE LANCET.

London, Saturday, August 11, 1838.

The week before last we made some observations upon the "Health of the Metropolis," and adduced several striking facts from the statements of the Parochial Medical Officers, tracing fever and the other fatal diseases which cut off innumerable lives annually in cities, to their physical causes. The attention of the public cannot be too closely rivetted on the connection between effluvial poison and disease; this silent invisible enemy, unlike the murderer, leaves no mark of its footsteps, no evidence of its agency, but "bloweth where it listeth," contaminating the air, and converting the balsam of life into a leprous distilment. Sickness and death follow in its train; but these are considered by the thoughtless multitude to be inevitable, and are ascribed to mysterious powers, over which humanity has no direct control. The violence of disease, and the convulsions of nature, were attributed by the priesthood of the ancients to the Gods—*Morbos tum ad iram Deorum immortalium relatos esse, et ab iisdem opem posci solitam*—and we still have public prayers against foul weather and epidemics. But saner views are beginning to prevail, and these frightful devastations are no long regarded by rational people as special interventions of Providence, to be met by prayers and sacrifices and the endowment of temples. Instead of offering hecatombs to incensed Apollo, the land is drained where ague prevails, the streets are widened, the houses are ventilated, and the sewerage is made to carry off the residual accumulations of congregated thousands, underground, and these precautions, which are neither more nor less than an obedience to the physical laws of the Universe, and its Eternal Author, are found to be more effectual in averting plagues than the solemnities of paganism, or the pageantry of superstition descended from the dark ages.

Several remarkable instances are cited in the Report by Dr. Arnott, Dr. Kay, and Dr. Smith, of the cessation of fever and other diseases, on the removal of their causes; and in considering the suggestions of their Report this is the first point which demands our attention. The following fact is recorded by Dr. Arnott:—

"1. In the field behind Euston-square, towards Somer's-town, now occupied by the commencement of the Birmingham railway, there was, until lately, near some very extensive cow-sheds, the meeting of several public drains or sewers in an open ditch, which often overflowed and covered a considerable space with a lake of the most odious filth. In the neighbourhood of this field typhoid fevers were frequent, and in a school of 150 female children in Clarendon-square, Somer's-town, every year while the nuisance was at its height, the malaria caused some remarkable form of disease. In one year it was an extraordinary nervous affection, exhibiting rigid spasms, and then convulsions of the limbs, such as occur on taking various poisons into the stomach; more than 30 of the girls were so affected. In another year it was typhoid fever, affecting an equal number of the children; in another, ophthalmia; in another, extraordinary constipation of bowels, and so forth. Since the covering of the drains all these diseases have disappeared."

Dr. Southwood Smith has brought together several examples of the beneficial effects of sewerage occurring under his own observation in the following paragraph:—

"4. There is evidence, derived from the history of these very localities, that the formation of a common sewer, the filling up of a ditch, the removal of stagnant water, and the drainage of houses, have rendered a district healthy, from which, before such measures were adopted, fever was never absent. This is strikingly exemplified in the present healthfulness of the upper part of the Hackney-road, in which an excellent common sewer has been recently made, the neighbourhood of which is now well drained. In this part of the district no case of fever is known to have occurred during the present epidemic, although formerly the houses, even in the principal thoroughfare, and more especially the streets, lanes, courts, and alleys adjacent, were the constant seats of fever.

"A still more striking illustration of this fact is afforded by the altered condition as to health of the lower part of High-street, Aldgate, in the jurisdiction of the Corporation of the City of London. The south side of this street is occupied by butchers, and the slaughterhouses are behind the street. Formerly this place was in an exceedingly

filthy condition; at that time fever of a typhoid character was occasionally prevalent in all this neighbourhood.

"About three years ago a common sewer was made by the Corporation of London in this street, into which, after incredible trouble, the Commissioners succeeded in inducing the butchers to open drains from the slaughterhouses and the dwellings around. Even now the blood and filth from the slaughterhouses lie sufficiently long on the surface to produce an offensive odour, but, on account of the excellence of the drainage, the same particles of matter do not lie sufficiently long to putrify. Fever has been comparatively absent from this neighbourhood ever since the opening of these drains. Dwellings thickly crowded with inhabitants stand all around the slaughterhouses, yet here, where the materials for the production of the worst forms of fever are most abundant scarcely a case has occurred, even during the present epidemic. On the other hand, in the passages, courts, and alleys on the very opposite side of the street from the houses of which there are no drains into the common sewer, fever of a fatal character has been exceedingly prevalent. I have myself very recently attended several families in these courts labouring under the worst forms of spotted fever; but I have neither seen nor heard of a case on the opposite (the south) side of the street; whereas there is hardly any part of Bethnal Green or Whitechapel in which fever has been more prevalent or fatal than in the streets, courts, and alleys which go off from High-street, Whitechapel, continuous with High-street, Aldgate, to which the before-mentioned sewer does not extend. In the streets, courts, and alleys just adverted to, which branch off from the main street of Whitechapel, there is either no drainage at all, or what there is, is superficial, and exceedingly imperfect."

These facts explain the causes, and indicate a very obvious remedy for the endemics of cities. It must not, however, be concealed that the removal of these causes can only be effected at considerable expense; but this element is of trifling amount when weighed against the sufferings and ruin of innumerable families. The actual expense of fever patients to the parishes would, moreover, make up no small item of the probable cost of destroying the nuisances for ever, if we take the Bethnal Green and Whitechapel returns as the basis of calculation. The extra expense for fever cases in those Unions for the quarter ending Lady day, 1838, was £617, giving £2468 as the annual rate of expenditure in money, paid by the parishes, without taking into account the loss of time by sickness in the families of artisans and tradesmen.

The Commissioners of Sewers in the metropolis, and in the county towns, have rendered great service to the country; and it would not be difficult to trace the amelioration of the health of the people of England down from the passing of the Bedford Level Act, to first quarter of the present century, when the accumulation of the population in cities, factories, workhouses, and other large establishments, has in spite of all the improvements in medical science, given a new impulse to epidemics, ordinary sickness, and death, which can only be combatted by extraordinary exertions. The Commissioners of Sewers are interested in introducing sewerage: after that they are interested only in levying heavy rates on the inhabitants; if they render the sewerage not insufferable they will advance no step further; the nature of the thing admits of no competition, and the health of the population is absolutely at the mercy of trading companies; influenza, fever, cholera, may lay houses waste, but so long as the inmates are recruited from the country, the Commissioners of Sewers are no sufferers—their dividends are not lowered—their pockets remain untouched. Every one regrets that the Commissioners are not bound in their unguarded local Acts to protect the lives of the poor in the districts pervaded by their ill-conditioned, uncleansed drains; but the ratepayers are placed, as we have seen, precisely in this predicament; they themselves suffer if endemics be generated or fostered in their parishes. They are bound to provide for the sick paupers, and the widows and orphans of the dead fall on their hands for support. How unfortunate, then, is that arrangement which takes away from the citizens the control over the sewers, and prevents the municipal and other local authorities from adopting and maintaining effectual means for removing all the animal and vegetable poison from their streets and dwellings?

We fully concur in the suggestion that immediate steps should be taken for the removal of the crying nuisances described in the Report: and we go further; we maintain that steps should be taken for gradually withdrawing the sewers from the control of private companies, for improving the construction of these cloacæ, and placing the management in the hands of the ratepayers, and the municipal corporations. An Act of Parliament may be framed for their guidance, and the necessary modifications in different localities, may be suggested by Boards of Health.

In no part of the suggestions made by Dr. SOUTHWOOD SMITH, respecting a free circulation of air through the streets, is there anything objectionable, excepting in the statements which he advances in their support:—

"It is essential," he tells the Commissioners, "to the act of respiration, when performed in a perfect manner, that the air should impinge on the respiratory organs with a certain degree of force, which condition is fulfilled when respiration is carried on in a large bulk of air, but not when it is performed in a confined space; consequently in the latter case a less quantity of air enters the lungs, and its effect in depurating the blood is less complete."—p. 27.

This is sad natural philosophy. The pressure upon the respiratory organs is always in exact proportion to the elastic force of the atmosphere, and the relative pressure at the same altitude is precisely the same upon the mercury in "the confined space" of the bulb of a barometer, as upon the surface of the ocean reflecting the boundless sky. This *was* the case; if the worthy Doctor have discovered any new principle in pneumatics, he should hasten to publish the facts upon which the novel doctrine of his text is founded. He suggests in another part of the Report the erection of *Fever Hospitals*; but the expediency of such a course is becoming every day more dubious. The case of the *London Fever Hospital* has been brought before the public: we said nothing against that institution, at the time when its claims were urged upon the charitable, as *one* institution of the kind may be required for the absolutely destitute, and for friendless servants, whom their masters are too ready to abandon. But the same objections lie against Fever Hospitals as against Foundling Hospitals and Lying-in Hospitals: the mortality is unquestionably higher in those institutions than in private dwellings, however miserable, and vast numbers die from secondary diseases generated in such hospitals, who would, like the poor Irish, recover at their own homes. It is for the advocates of Fever Hospitals, who call for large sums of public money, to prove that these views are ill-founded: we can advance several statistical facts in their support. While repudiating some of Dr. SMITH's suggestions, we feel great pleasure in acknowledging the general accuracy of his views, and the justness of his descriptions.

Improvements are proceeding rapidly in the metropolis, and the narrow streets and miserable houses of past ages, built perhaps on some such notion as TACITUS refers to—*Quoniam angustiae itinerum et altitudo tectorum non perinde solis calorem admittunt*,—are gradually receding. The expense is, however, often enormous. To cite one instance: Mr. NELSON presented to the "Select Committee on Metropolis Improvements" an estimate of the expense of carrying a street from the north end of St. Martin's-lane through the miserable neighbourhood of Seven Dials, to a circus which he proposed forming at Plumtree-street and Charlotte-street. "The estimate for that line," he observed, "will require 282 houses to be taken and 183 trades to be compensated; the value of the houses and compensation to the trades I estimate at £437,890." Is it not, then, to be regretted that in the suburbs of the metropolis, and of all our cities, innumerable houses are erected every year in utter defiance of architectural regularity and of the established laws of hygiene. The remarks upon this subject at the close of the report by Dr. ARNOTT and Dr. KAY, are the most important in the whole document. After stating their conviction that the evils which they have encountered can never be redressed unless powers are confided to

some authority for the purpose, they proceed thus :—

"Many of the most recently erected suburbs of our great cities exhibit so complete a neglect of the most common and obvious precautions, that it can be attributed only to the fact of the increase of the population being so rapid that the owners of such property can command tenants, notwithstanding the absolute neglect of sewerage, and the absence of many precautionary arrangements absolutely necessary to insure health.

"We do not attempt to determine to what body these powers should be confided, nor do we consider it necessary to describe the exact mode of their operation, but it seems most expedient that to some authority should be confided power to cause the survey of land (in the vicinity of towns) likely to be built upon, and to enforce certain conditions on the owners and lessees of such property.

"Thus no building should be commenced until plans of the intended streets were prepared, describing the situation of every block of houses for such an extent of area as should be required by the board intrusted with the regulation of the precautionary measures; duplicates of such plans should be deposited with the board, and no building should afterwards be erected on the site otherwise than had been delineated in the plans.

"The board should have authority to prevent the formation of streets of less than a certain number of feet in width, and to prevent the formation of courts having communication only by means of covered entries, or alleys of less than a definitive width, with thoroughfares and streets.

"It should also have power to prevent the habitation of cellars in any houses erected after the period of the enactment.

"Authority should be given to require that before any buildings are erected on any plot of ground now unoccupied, or only partially occupied with houses, such plot of ground shall be drained by such sewers as the board shall deem sufficient; and provided any owner or occupier of such land should proceed to build without having provided such sewers as the board of guardians should direct, the board should have authority to cause such sewers to be made at the cost of such owner, and should be empowered to recover the cost from him.

"That the board should have authority to require that every habitation should be provided with a drain communicating with the main sewer, with a proper receptacle for every kind of refuse."

We have received a long letter from Mr. Charles Clarke, late pupil and assistant to Sir James Murray, claiming for latter named gentleman the honour of having discovered the therapeutical agency of what he calls "dry cupping." We have ever been willing to "render unto Cæsar the things which are Cæsar's," &c.; but we did not deem it necessary to introduce Sir James Murray's name into an article which was simply the condensation of a memoir contained in a foreign journal. The reclamation of Mr. Clarke is, therefore, somewhat misplaced, as there was no question whatever of priority, or of discovery in the memoir of M. Junod, who confined himself to a description of the apparatus used by him, and of its effects in several diseases. As, however, the question of *priority* has been again raised by Sir James Murray, we shall here give our opinion upon it. An impartial consideration of the question has convinced us that both Sir James Murray and M. Junod were led to apply the same remedial principle to the cure of disease without having had any communication with each other, or without any suspicion of plagiarism attaching to either gentleman. Sir James Murray assures us that one of his memoirs, (the earliest we presume), published on July 14, 1832, in the "London Medical and Surgical Journal," was "circulated in Paris and the principal towns of the Continent;" but, three years previously to this period, the experiments of M. Junod were publicly exhibited in the Hotel Dieu and other Parisian Hospitals. On the other hand, it is not less certain that Sir James Murray had been engaged on the subject of the "removal of the atmospheric pressure" long before the year 1830.

So far, then, as the question of "priority" is concerned, Sir James Murray may claim the advantage; but he cannot claim, with justice, the honour attached to the *discovery* of the principle, and would do well to imitate M. Junod by abandoning any such pretension. The "discovery," in fact, belongs to a non-medical person of the name of Smith, who obtained a patent in the year 1798, for an instrument, the object and principle of which were exactly similar

to those employed by Sir JAMES MURRAY and M. JUNOD. The description of SMITH's instrument, together with an account of the cases in which its application had been found useful, is contained in a pamphlet published in the year 1803, by RALPH BLEGBOROUGH, M.D., and entitled "Facts and Observations respecting the Air-pump-vapour-bath," &c.

This instrument was adapted for the local application of vapour; but Dr. BLEGBOROUGH informs us, that one of its principal uses was also that of "taking off the pressure of the atmosphere" from certain parts of the body. In an appendix to the pamphlet we find several cases illustrative of the medicinal power of this instrument, which the author assures us is likewise "highly "efficacious in preventing the absorption of "animal poisons by the removal of atmo- "spheric pressure." This principle, as our readers will remember, was put forward not many years ago, as a "discovery" by the late Sir DAVID BARRY.

The pamphlet of Dr. BLEGBOROUGH is a very curious one, and we recommend it to the attention of Sir JAMES MURRAY, if it have not already fallen under his notice. M. JUNOD, we are convinced, was unacquainted with its contents when he published the result of his labours on a similar subject.

INSOLVENT DEBTORS' COURT,

Wednesday, August 8, 1838.

[*Before the* CHIEF COMMISSIONER.]

IN THE MATTER OF THE PETITION OF WILLIAM MERRICK.

THIS insolvent was opposed by Mr. COOKE on behalf of Mr. Richard Sill, an attorney.

Mr. WOODROFFE supported the petition.

In this case an action had been brought by the insolvent, a medical practitioner officiating at the Kington Union Establishment, against T. Wakley, Esq., M.P., for a libel in No. 8 of THE LANCET, of which Journal the honourable member is the editor, in order to relieve his character from the imputation cast upon it for unskilfulness in his profession. The insolvent sought only nominal damages for the action.

Mr. Wakley among other pleas had, in the above trial, put a justification on the record. The action was tried before a special jury, at the Hereford Spring Assizes, before Mr. Baron Alderson, when the jury found a verdict for the plaintiff (insolvent) damages, one farthing. On application to the learned Judge, by Mr. Sergeant Ludlow, to certify, his Lordship declined to make any order. The costs of the trial amounted to £300 and upwards, from which the insolvent now sought to be discharged by the court. In his schedule he had disputed the claim of Mr. Sill, his attorney in the action, on the ground that Sill had told him that the plaintiff should have nothing to pay, and that the damages would carry costs.

From the examination of the insolvent, it appeared that he had not received from the College of Surgeons a diploma as a surgeon, but that he possessed an indenture of apprenticeship in 1817. The salary granted by the Medical Union Board at Kington had been £180, which with his business, amounted to £300 a year. On the libel appearing in THE LANCET, in December last, he consulted Mr. Sill upon the subject, who told him he had a good right of action against Mr. Wakley, and that he had no doubt but that the jury would award damages commensurate with the nature of the libel. Money being necessary to commence the the action and bring it to trial, the insolvent and his sister-in-law (a Miss Fall) joined in a promissory note for £300, guaranteed by a bill of sale on some furniture, &c. The note not being honoured when due, the insolvent and his sister had been arrested. The note, it appeared, had not been paid away by Mr. Sill, who advanced the money, but kept in his own possession.

Mr. COOKE submitted that his client's claim ought to be admitted and not disputed on the schedule.

Mr. WOODROFFE said he could not resist the application.

The CHIEF COMMISSIONER directed the amendment to be made.

Mr. COOKE put in an affidavit from Mr. Sill, respecting his correspondence with the insolvent regarding the action against Mr. Wakley for the libel.

Mr. COOKE said the insolvent having consented to make the amendment, he should not further oppose his discharge.

Mr. WOODROFFE prayed that the discharge might go without giving up the duplicate o. a watch, which the Court granted, and he was declared entitled to the benefit of the Act.—*Morning Chronicle*, Aug. 9.

MERRICK, it appears, stated in Court, through his Counsel, that in the recent action at Hereford, he "sought only *nominal* damages." This is a very gross error. The Counsel for the plaintiff pressed for damages in a manner which seemed to show that the very existence of the plaintiff de

pended on his receiving a pretty considerable sum. With this view the indecency was committed of putting members of the Board of Guardians into the witness-box,—the very men who had employed MERRICK, and who, in fact, were legally responsible for the misconduct of their incompetent medical officer. Sought for only *nominal* damages? Why, a motion was made for a NEW TRIAL, because the verdict happened to be so very unsatisfactory to the plaintiff, and so exceedingly unprofitable to Mr. SILL, the plaintiff's *clever adviser* and lawyer. MERRICK now, as one of the consequences of the action, has passed through the Insolvent Debtors' Court. We hope, even yet, that poor PROTHEROE, the victim of MERRICK's stupidity, will institute an action against the Kington Board of Guardians, and cause the trial to take place in this metropolis. We would like much to see what would be the verdict of a London Jury in such a cause.

A BRIEF report of the trial at Wells, of WEBBER and WIFE against WARD shall be given in the next LANCET, together with a few remarks on the extraordinary Verdict of the Jury.

PROFESSOR TOMMASINI'S REMARKS ON THE ACTION OF CONTRA-STIMULANTS.

TRANSLATED FROM THE ITALIAN,

By KEITH IMRAY, *M.D.*

To the Editor of THE LANCET.

SIR:—I enclose you a translation of a paper by Tommasini on the *contra-stimulant* treatment of inflammatory diseases now so much in use in Italy. You may, perhaps, consider it worthy of insertion in your valuable Journal. I have the honour to be, Sir, your most obedient servant,

KEITH IMRAY, M.D.

Horncastle, July 25, 1838.

The *depressing or contra-stimulant* action of some medicines and poisons is no longer a matter of question among the majority of the philosophical physicians of Lombardy.

Since the time that I proved by comparative experiments, as far back as the years 1805 and 1806, the opposition which exists between the effects of some contra-stimulating remedies, and those of the most certain and best known stimulants, few physicians among those who interest themselves in the art, now venture to combine the antimonials with opium, squills or digitalis with camphor, aconite or cicuta with ammonia, as they were accustomed to do before I brought this important question into notice: and the belief that the preparations of antimony, for example, are contra-stimulating or depressing is tacitly received, except by a few who, though not subscribers to the doctrine of contra-stimulus, have had no dread for some time past to prescribe in the same diseases, and at the same time, the antimonials and bloodletting; and in hyperesthenic affections, though not suspected of *gastricismæ*, to use tartar emetic without producing any evacuation, or intending to do so. I am well pleased to have been the first in Parma, and certainly among the first in Italy, to contribute to this change of practice, and time will show its utility. It gratifies me to have predicted long ago, that the ideas on counter-stimulants then commencing would form, in course of time, a new doctrine, and would be the foundation of an important reform. Nor am I less pleased to have been the first in opposition to the whole Brownonian school,—who ventured to establish the principle that *inflammation in itself, and in the parts which it attacks, is always a disease of increased excitement or of a hypersthenic nature:* a principle to which the most exact and repeated observations have led me,—which gives the strongest support to the doctrine of contra-stimulus, and which in conjunction with it, and some rigorous views on diathesis and the relations of influence or dependance, which in a state of disease the parts have with the whole, will form a great part of my pathology;—a principle, in fact, which, after having many opponents, commences, by degrees, to be extensively adopted.

Whilst I expected that Rasori, the discoverer of counter-stimulation, would publish his doctrine and observations, I endeavoured to demonstrate the existence of agents capable of positively depressing the vital excitement. I have published in various parts of my works, and in our own journal, when speaking of digitalis, hints of my views with regard to the action and immediate effects of contra-stimulating substances. I have continued my observations since, extending them to different medicines from those on which I first made experiments, and I trust an outline of these observations will be acceptable to the medical public.

Tartar emetic.—Often-repeated experiments have convinced me of the depressing action of this powerful remedy, and it has been courageously used by me in many dis-

eases of the chest decidedly hypersthenic, and always with the result which I anticipated. The advantages which the repeated abstraction of blood had produced in the most acute pneumonia, the decrease, for example, of the pain of the side, of the cough, of the anxiety, and of the fever, I have never seen done away with; but, on the contrary, decidedly confirmed and increased by the subsequent use of a solution of eight, twelve, or eighteen grains of tartar emetic taken in divided doses in the course of the day. The good effects of this medicine were not derived from any evacuation, for patients with inflammation bear surprising doses of tartar emetic without any alvine evacuation whatever being produced. There is occasionally a certain degree of languor, of anxiety, or uneasiness at stomach, but rarely vomiting, or if that does take place sometimes, so little matter is generally expelled, that it would be wrong to attribute the depression of excitement to the evacuation or to the abstraction of stimulus. I have carried the dose in different inflammatory diseases of the chest and throat as high as twenty-four grains, thirty grains, or even half a drachm, in the course of the day, without producing decided vomiting, or any other evacuation, and the result has always been most marked diminution of heat, redness, and vital movement.

Case 1.—In the case of a robust young man, affected with pain of the side, sharp fever, dry cough, expectoration tinged with blood, and an acute burning sensation at the throat, after twice taking blood, which was covered with a thick buffy coat, I immediately administered tartar emetic to the extent, first, of eight grains, then of half a scruple, and afterwards of sixteen grains in the course of the day. The advantages derived from the bloodletting were in no way disturbed by the use of this remedy. On the fifth day of the disease the pain of the side and cough returned. I then carried the dose of the tartar emetic to twenty grains; the pain again ceased, the cough was quieted, and the fever abated. About the sixth or seventh day the dry cough became again urgent; the fever not giving way, and the patient not having slept the previous night, I ventured to administer a pill containing a grain of opium. Some hours after this experiment the restlessness increased, the skin became hot, the cough dry and frequent, and the fever augmented. I immediately had recourse to the tartar emetic, which I had intentionally omitted, and under the use of this remedy the abovementioned symptoms yielded, the skin became soft, the expectoration easy and copious, and the disease was completely subdued.

Case 2.—In a case of severe inflammation of testicle, accompanied by acute pain extending to the belly, psoas muscle, and thigh, the good effects obtained, after bloodletting, from the continued use of large doses of tartar emetic were produced in a prompt and evident manner. The patient assured us that the pain of the testicle, the tension of the cord, and the heat of the parts affected, yielded, as if by enchantment, in proportion as the uneasiness at the stomach increased from the repeated use of the emetic, which once or twice caused decided vomiting. One night the surgeon of the parish, acting on my advice, applied cold saturnine lotions, and not thinking it improper, prescribed in my absence, some opium pills to procure sleep. But the restlessness far from being diminished, was augmented by this treatment; the pain became more violent, and the tension of the parts and the inflammation increased. The following day I recommended the tartar emetic to be given to the extent of thirty grains in twenty-four hours, and prohibited the patient from taking any of the medicines denominated anodynes; after experiencing some degree of languor and desire to vomit, the patient felt the pain, the tension, and the heat of the parts affected subside by degrees, and in less than four days the testicle was reduced almost to its natural state.

Case 3.—Luigia Bondocci, a young lively girl, was affected with obstinate rheumatism of the muscles of the back attended with acute pain of the side. Bloodletting and purgatives had always relieved her to a certain extent, but the disease was far from being overcome by the remedies. To relieve her daughter from an apparent weakness, which the preceding loss of blood and purgatives seemed to justify, her mother had procured some foreign wine and spirits; and besides these the patient had taken some anodyne pills with camphor, prescribed by a physician, with the intention of promoting perspiration and procuring sleep. The patient now became worse, and I was called to visit her, and it appeared to me to be a case in which not only the tartar emetic would be successful in divided doses, but would also show the bad effects which constantly result from the use of stimulants. The effect fully answered my expectation. A solution of eight grains of tartar emetic in four ounces of fluid, which I administered during the day, produced languor and uneasiness, but relieved the pain. This treatment was continued four days before the disease was completely conquered, but during that time no evacuation by vomiting or purging had taken place.

Case 4.—In the case of a son of Signor Tenente Galeotti, treated in conjunction with myself by Dr. Nobili, for severe pneumonia, the same remedy produced the most happy results. He had an urgent dry cough, severe dyspnœa, sharp fever, face flushed and skin hot. It was with much difficulty that he was prevailed on to allow himself to be bled. Tartar emetic given to the extent of eight or ten grains in twenty-four hours, checked

and overcame the disease without producing vomiting or purging. The abatement of the cough and fever, the softness of the pulse and skin, were the results which very soon accompanied the state of languor and obvious depression of the morbid excitement.

In various cases of ophthalmia, some of which were very severe, I have seen the inflammation kept within bounds, and overcome, and all its symptoms quickly removed by means of the depressing action of tartar emetic. Among many which I might enumerate, I recollect with particular satisfaction the case of one of my friends, Dr. Antonio Pavesi, attacked by severe inflammation of the eyes; he obtained the most decided relief from a tartar emetic mixture which I prescribed for him immediately after he had been bled, and by this treatment the disease was conducted to a happy termination without the medicine producing any greater evacuation than usual. Under the nauseating action of tartar emetic the pulse which had been vibrating and frequent, became soft and less frequent, and the heat diminished, whilst the sharp burning pain which tormented the patient was removed. The use of the antimonial mixture alone, soon removed the augmentation of the symptoms which had been brought on shortly before by the use of stimulants.

Case 5.—The difference which exists between the effect of the action of stimulants and that of tartar emetic was more manifest in the case of Luigia Carra, a plethoric and robust woman, convalescent from an obstinate inflammation of the eyes, of which she had been cured by bloodletting and purgatives. Weakened from the effects of the medicine she had taken, and flattered with the idea of being completely cured, she yielded one day to the cravings of her stomach and the advice of her friends, and indulged in eating and drinking, and heated herself much more than was consistent with a state of convalescence. The inflammation of the eyes was quickly rekindled, the pain renewed, and the impression of light again became painful. The patient sent for me, and requested to be again bled. I assured her that she would derive as much benefit from an antimonial mixture. A solution of six grains of tartar emetic taken during the day, and continued for two or three days, brought on slight vomiting, but relieved all the inflammatory irritation of the eyes and restored the patient to health.

Case 6.—Encouraged by results of so satisfactory a nature, and becoming daily more certain of the depressing or contra-stimulating power of tartar emetic, I extended the use of it to other inflammatory diseases. The wife of one of my most esteemed friends, Signor Ruspaggiari, when six months pregnant, in the best health, and with all her functions in full vigour, was attacked by a most acute inflammatory affection of the cheek, which extended to the left jaw and to the ear; the pain was very severe, with great restlessness and inability to sleep; the pulse was vibrating, though not very feverish. I employed alternately bloodletting with an antimonial mixture. The latter remedy, without producing either vomiting or purging, moderated the symptoms in a surprising manner, and far from producing effects opposed to the bleeding, acted in concert with it, subdued the morbid excitement, and abated the restlessness and pain.

Case 7.—A young man, Signor Antonia Crespi, recovered from an obstinate and dangerous inflammation of the chest under the use of tartar emetic. The cough was urgent, and the pain of the side acute, the fever violent, increasing towards evening, and the expectoration tinged with blood. In spite of the apparent debility, there was decided inflammation of the lungs, requiring the use of depressing remedies. The patient was bled twice, and the blood both times was covered with a thick buffy coat. The tartar emetic was tolerated by the patient, without causing any evacuation whatever; the symptoms gradually diminished, and a cure was obtained, to the surprise of many. Some anodyne preparations as they are called, or stimulants (containing mineral, liquor opium, &c.) which had been given during some restless nights, with the intention no doubt of quieting the patient's cough, and procuring sleep, always increased the restlessness, the cough, and the fever, augmenting that morbid excitement which the antimony so decidedly subdued.

I have lately shown, in some cases of erysipelas, scarlatina, and acute pleuritis, the constant correspondence which generally takes place between the grade of hypersthenia, or of inflammation, and the power of the stomach in supporting high doses of tartar emetic. I have used tartar emetic prepared by different chemists, and with the exception of some difference dependant on the different preparations, I have always seen patients with inflammatory diseases support large doses of it. I have also observed that tartar emetic dissolved in a small quantity of fluid, and taken in the form of mixture, does not in general cause vomiting so readily as when dissolved in a large quantity of water. Patients in whom, under other circumstances, a grain of tartar emetic has been sufficient to occasion the most decided vomiting, have, when attacked by inflammatory diseases, supported, without vomiting, eight, twelve, and eighteen grains. The inflammation having been reduced, and the excitement depressed, neither these high doses, nor much smaller ones have been longer tolerated.

Observations, similar in kind to those just detailed, have enabled me to establish a principle which has been alluded to in an-

other publication. I have found that inflammation, of a certain degree, will run its course, and pass through a determinate number of stages, in spite of treatment; hence the pain, heat, and other symptoms, gradually augment, notwithstanding early and repeated bloodletting, until the disease has reached its maximum of intensity; hence a patient affected with pleuritis or scarlatina, will generally vomit from very small doses of tartar emetic, if administered at an early stage of the complaint, while they will bear it in large doses as the disease approaches its acme; when the latter is subdued, and the patient in a way of recovery, small doses again produce nausea and vomiting; in other words, tolerance of the remedy increases and diminishes with the intensity of the symptoms.*

(*To be continued.*)

UNIVERSITY COLLEGE HOSPITAL.

ANEURYSM OF THE SUBCLAVIAN.

(*Case of W. S., continued from page 669.*)

July 24. Has been comfortable during the day; pulse varied from 104 to 120,

25. Had a restless night; pulse this morning 130. An opening draught which he took yesterday has operated four or five times. He complains of much difficulty of breathing. Countenance anxious.

10 P.M. Feels considerably worse, and suffers from violent pain in the chest. Has had slight attacks of shivering, succeeded by heat and perspiration, during the day, and the attacks are now much worse; pulse 116. To apply twelve leeches to the chest.

26. Passed a comfortable night, and slept well; feels better this morning; pulse 112. To have some tincture of camphor and valerian when the heat and difficulty of breathing distresses him.

Evening. Has slept a good deal during the day. Feels now much more comfortable.

27. Had a good night; pulse 116; respiration less oppressed; much weakness and thirst. Has not again complained of any unusual sensations in his head. No pulsation has returned in the aneurysm or right arm; the slough on the surface of the aneurysm has separated, and appears tolerably deep. Has occasional attacks of shivering, succeeded by heat. His urine has passed very freely for the last few days. The temperature in the right limb is much the same as that in the left, and with the exception of occasional sensation of slight numbness, complains of nothing unusual in it. A refrigerant draught to be taken when the heat of the surface is oppressive. Has not slept during the day. The nourishment he has taken has consisted of large quantities of milk, beef-tea, tapioca, &c. Has suffered this evening from violent palpitation of the heart.

28. Much the same as yesterday. Has had cold shivering succeeded by heat.

29. About 1 A.M. hæmorrhage from the wound came on, and he lost about four ounces of blood before it was discovered. The bleeding was immediately arrested by the application of a compress, secured by the elastic bandage. He was extremely faint, and took half an ounce of the aromatic spirit of ammonia. His pulse became so quick that it could not be counted. Great depression, and violent perspiration for two hours.

Evening. The compress was renewed, and afterwards slight hæmorrhage took place; and this again occurred during the night.

30. Was in better spirits during the day, and took a mutton chop, and in the evening two eggs. He had passed his water involuntarily during the last 24 hours, and wetted his bed to such an extent as to require his removal to a fresh one. The bandage and compress were also renewed, the former one being saturated with blood. An hour afterwards hæmorrhage to the extent of three ounces took place, by which he was extremely depressed. His pulse could not be counted. He never recovered from the collapse, and died about two o'clock on the 31st, five hours after the last hæmorrhage.

Autopsy.—On removing the sternum a quantity of pus and blood was found in the anterior mediastinum. A quantity of extravasated blood about the wound. The pericardium contained a quantity of bloody serum. A false membrane was found both on the heart, and lining the whole interior of the pericardium. The arteries were traced upwards from the heart. The innominata was shrunk, and found plugged with a *firm and adherent coagulum*. The carotid was separated from the innominata, the ligature lying unconnected in the wound. The coagulum filled the carotid from the division into the external and internal, to the lower divided portion. The subclavian was still connected to the innominata by a small portion, and the ligature had not come away. No coagulum was found in the subclavian; the vertebral and all the small arteries arising from it, were pervious. The end of the subclavian, pointing to the heart, was open, and from the end of it the hæmorrhage must have occurred. The aneu-

* The tolerance of bloodletting (as well as of contra-stimulants), according to the progress and stages of inflammation, has been long known to Tommasini and his followers, though advanced at the present day by Dr. M. Hall and others as a new doctrine. This, I presume, must arise from the little attention paid in this country to Italian medical literature.—K. I.

rysmal tumour was much shrunk, about the size of a walnut, firm, and the slough had extended down to its parietes from the external integument; at this point they were much thinned. The tumour was firmly connected to the surrounding parts.

LARGE STONE IN THE BLADDER.—DIVISION OF BOTH SIDES OF THE PROSTATE.

J. R., aged 46, was admitted June 22, under the care of Mr. Liston. He is a farmer, of temperate habits, and in the enjoyment of tolerable health. He was in the habit of passing gravel in his urine for a period of twenty years, until nearly three years since, when the gravel ceased to be passed. Two years and a half ago, after much exertion, blood passed with his urine, and at this time he began to experience uneasiness at the end of the penis, which was more severe at intervals. He subsequently suffered from the general symptoms of calculus, but he never noticed that the stream of water suddenly stopped. Mr. Liston sounded him and detected a large stone of hard consistence and rough.

25. Mr. Liston performed the lateral operation. Owing to the size of the stone he made the first incision rather larger than usual, and divided the prostate on both sides. The stone, which was very large and firm, was then removed. The patient went on well and is now about to leave the hospital.

Mr. Liston said in respect to this case, that the stone was considerably above the ordinary size, and it became necessary to exert considerable care in its extraction, to prevent the laceration of the soft parts. He was aware, from the previous sounding, that the stone was much larger than usual, and he was, therefore, prepared for the step which he found it necessary to resort to; that of dividing to a very small extent the right side of the prostate. The students were aware that the bladder was very dilatible, and that a very small incision into the prostate gland was required. The stone having been carefully seized in the axis adapted to the incision, it was steadily and gradually brought forward whilst the parts were pushed back over it; this of course took up some time, but all terminated happily, and the stone was removed without the occurrence of the slightest laceration or injury.

DIABETES INSIPIDUS.

In lecturing on a case of diabetes mellitus the other day, Dr. Elliotson exhibited the urine of a patient at present under his care. This individual is a married woman, and is suffering under all the symptoms of diabetes, such as the thirst, loss of appetite, dryness of the skin, emaciation, and that peculiar anxiety of countenance which is considered indicative of the disease. The food she takes appears to be of no benefit; her gums are spongy and turgid, pulse quick, spirits much depressed, debility extreme. She passes a very large quantity of urine. In short, she has every symptom of diabetes. The urine, however, is materially different from that secreted in ordinary cases of this affection; its colour, instead of being a pale lemon colour, was whitish, indeed, almost colourless. Its specific gravity, instead of being above that of healthy urine, was only that of water, 1000°, and of a purer nature than any secretion he had ever seen, except that which takes place in cases of hydrocephalus. The case was, indeed, a rare one, being, in fact, an instance of polyuria, or diabetes insipidus. The case was, indeed, so uncommon that Dr. Rayer, from whom he had lately heard on the subject, almost doubted if he, Dr. E., had ever seen such a case. He had certainly seen some, not many. He had seen such cases, terminating in diabetes mellitus; and some cases of diabetes mellitus terminating in symptoms and a condition of urine like that observed in the present case. It was exceedingly uncommon for a case to go on as this did towards a fatal termination. The plan pursued was that of supporting the system, for which carbonate of iron, strychnine, and generous diet were prescribed.

MEDICAL EVIDENCE BEFORE CORONERS.

To the Editor of THE LANCET.

SIR:—Your observations respecting the necessity of intrusting the office of coroner to a medical man acquainted with the present state of chemical analysis, elicited from the imperfect post-mortem examination of Mr. Pow, are just and self-evident. On reading the evidence given by Mr. Brooke to the coroner, I addressed a letter to the "Times" newspaper under the signature of "Medical Student," in which I showed that if the scalpel had not found any traces of poison the chemical analysis ought to be resorted to. I cited two examples, one taken from "Feverbach's Causes Celebres," and one from the "Journal de Pharmacie" (August, 1837, page 386), to prove that this analysis could be effectually performed, even after the corpse had undergone decomposition.

I addressed these observations previous to the passing of the verdict, in order that some professional man of influence might take notice of it and insist upon the necessity of a chemical analysis of the viscera and their contents.

I do not know whether this letter appeared or not, but I see from your statement that nothing of that kind has taken place.

I write these lines both in order to confirm

with my own experience the truth of your remarks, and to exculpate myself from having neglected that which I think was the duty of those connected with the inquest to suggest. I remain, Sir, one of your oldest and constant readers,

Dr. J. de Prati.

8, London-street, Fitzroy-square,
August 4, 1838.

To the Editor of The Lancet.

Sir:—My attention has been directed in in the last published number of your weekly Journal, to certain strictures upon my evidence, at an inquest held upon the late Mr. Pow.

I am aware it would occupy too large a space in your publication to enter fully into a refutation of all the charges you have thought proper to bring forward; at the same time, I cannot but express my surprise that the Editor of The Lancet should rely for information upon the garbled extracts of a daily paper. That I did say that I would not give ardent spirits in delirium tremens I admit, and that opinion I still retain, as in those cases where I have witnessed its administration, its effects have invariably been injurious, if not fatal. At the same time, I am willing to admit, that there are medical men who sanction such practice. Had you perused my evidence with attention you must have perceived that my remarks applied more particularly to the case in question, where there was every reason to surmise the existence of inflammation of the stomach.

That I did not object to the exhibition of stimulants is evident from several of my replies, where I have recommended the administration of ammonia, ether, opium, camphor, &c., from which you must be sensible that my objection to the use of the spirit bore more particular reference to the incautious administration of it in the present case.

With regard to the examination of the viscera by chemical tests, as we had no reason to suspect the presence of any acrid poisons, the symptoms and course of the disease not leading to such a conclusion, they were not examined further than is stated in the evidence. And this, allow me to say, met the concurrence of three other medical men who were present.

In conclusion, I must take leave to remark, that comments upon a case not finally adjudicated, by creating a particular bias in the minds of the jury, would tend rather to defeat or baffle the ends of justice, than arriving at the much-desired object,—truth. I have the honour to be, Sir, your obedient servant. C. J. Preedy.

89, Chapel-street, Pentonville,
August 8, 1838.

Had Mr. Brooke and Mr. Preedy addressed notes to the Editors of the newspapers and complained of the inaccurate manner in which their evidence was reported, those gentlemen would have been spared the comments which appeared in this Journal.—Ed. L.

INQUEST on the BODY of Mr. POW. LETTER FROM MR. BROOKE.

To the Editor of The Lancet.

Sir:—My estimation of the manner in which the proceedings of coroners' inquests are usually conducted coincides so entirely with your own, and the course pursued in reference to the deceased Mr. Pow, appeared to me so very unsatisfactory, that I did not give myself the trouble of correcting the misrepresentations of my evidence as reported in some of the daily papers. As, however, the attention of the medical profession has by your notice of the proceedings been directed to the subject, I consider an explanation to be indispensable on my part, feeling as I do that the fault rests not with myself, but with the medico-legal incapacity by which my observations were directed. On entering the room in which the jury were assembled, not accidentally, but having been sent for at the instance of some one present, I was requested to examine the body, and when I endeavoured to ascertain the precise object of the examination, all I could learn was, the existence of a suspicion that large doses of the tincture of hyoscyamus had been administered medicinally, but no one ever suspected that the deceased had been otherwise poisoned. I was also requested to ascertain, if I could, whether inflammation of the brain had existed; and a hope was expressed that the inquiry would be expeditiously conducted, as the jury would wait my return. I therefore satisfied myself as far as I could on these points, and returned, leaving the body open for analysis, or further investigation if required by the coroner or jury. I stated that the stomach bore evident marks of inflammation. The minute patchy injection of the mucous membrane, (which was not all decomposed), unaccompanied by any congestion of the large vessels, and which differed alike from the cadaveric congestion described by Dr. Carswell, and from that state of congestion of the stomach which I believe frequently results from the repeated action of vomiting, I considered, and I believe justly, to be a distinctive characteristic of inflammation; and in reply to a question, I added that there was nothing in the appearance of the stomach that would lead me to suppose that any acrid mineral poison had been taken.

In reference to the question whether or not the tincture of hyoscyamus had been

administered, I said that the smell arising from the decay of the body rendered it impossible to judge by the smell of any vegetable medicine that might have been administered; and I am not aware of any other means of detecting the presence of hyoscyamus; and in reference to the same point, I subsequently said, in reply to an ill directed question, that some vegetable poisons would have been so changed by decomposition, that no analysis could detect them.

The soft parts of the head were so completely disorganised by the combined influence of putrefaction and maggots, that I do not hesitate to repeat my assertion that any examination of the brain in reference to the appearances of inflammation would have been *useless*, not impossible.

Had a negative analysis been required, or had the examination been directed, and its results recorded by a competent tribunal, I trust I should have superseded the strictures which you have justly made on the published report you have quoted. I am, Sir, your obedient servant,

CHAS. BROOKE.

35, Keppel-street, Aug. 6, 1838.

LETTER FROM A DRUGGIST.

To the Editor of THE LANCET.

SIR:—The letter signed "M. L.," in your Journal of last week, is an attack against druggists generally, and is unjust to go forth to the public without some defensive reply. That uneducated persons selling drugs frequently practise, and thus bring discredit on their fellow members, must be admitted, but cannot be allowed as a proof of the inadequacy of druggists in general, nor is it fair to select two isolated cases as a condemnation of the whole body, for, if such were admitted, there is not a week that passes but cases might be proved against qualified medical men mistaking one disease for another, and thereby subjecting their patients to a decided wrong treatment. That reformation is requisite there can be no doubt, but let that reformation begin at home. Why should surgeons dispense medicine, and take the bread out of the druggists' mouth? "Live, and let live," ought to be the motto; but does the dispensing surgeon act upon that principle? Does he not take from the druggist all in his power, and thereby compel him to act in the manner complained of? Let the surgeon adhere to his own profession, without infringing on the druggist's livelihood, and let every druggist be subject to a strict examination by the Apothecaries' Company, and I think, in a very short time, the profession would take a nobler stand in society; all parties be more respected and empiricism arrive at its final struggle. I remain Sir, your admirer and constant reader,

A DRUGGIST.

July, 30th, 1838.

OBJECTIONS TO THE CÆSAREAN OPERATION.

To the Editor of THE LANCET.

SIR:—Is it not a stigma in the nineteenth century upon the French and German surgeons, to see them publishing cases not only in this but other independent medical journals, in which they boast that they have performed the Cæsarean section with more or less perfect success? Is it not an operation through which under the most dexterous and skilful hands, the patient after *acute suffering* generally falls a victim to the knife or peritoneal inflammation? From the published reports in nine cases out of ten, is it not *decidedly unsuccessful*? How thankful, then, ought we to be that scientific men have now invented instruments with the humane intention, if possible, of *utterly eradicating* this cruel operation; and I sincerely trust that we may never again hear of its performance in this favoured isle. Amongst the instruments in use for this purpose, let me particularly call the attention of medical men to one invented by Dr. David D. Davis, and which I fear is too little known amongst the great body of our profession. It is called the Osteotomist, or Bone-Pliers, combining the principles of a punch and pair of scissars; and is, indeed, a power by which any portion of the fœtal skeleton presenting at the brim of a contracted pelvis may be broken down into small fragments of about half an inch in diameter, with the most perfect impunity to the tissues of the mother. The extreme breadth of its broadest oval rim is precisely three-quarters of an inch, so that where there is sufficient space to admit of the introduction of this instrument, together with the point of an index-finger to feed it with successive purchases of bone, it will be practicable to effect the delivery by the *natural passages*.

Its cutting ends are marked into two long and penetrated oval rims of unequal size, but nearly equal strength; the smaller is of a size to enter into, and to fit closely within, the parietes of the larger; the mutually-adapted parts of each being formed into a continuous oval edge, they become competent when brought together and firmly applied to their object, to exert a prodigious power upon any portion of bone placed within their grasp. The cutting edges of the osteotomist are protected by being enclosed within the level of the thicker parts of their respective rims which are everywhere rounded and polished into smooth surfaces without projections of any kind. The entire

length of the section of bone which it is competent to remove by one section of its cutting power is precisely an inch. It may be *safely* used within an intermediate space of *one inch and a half between the promontory of the sacrum and the anterior boundary of the brim of the pelvis;* it is easily used by first introducing the whole of the left hand into the vagina, the index and long finger must then be carried forward into distinct contact with the portion of cranial bone most immediately presenting, so as to be able to feed the mouth part of the instrument with successive purchases, and to guard effectually every other kind of structure from entering within its grasp; the whole of the instrument is made of steel.—(*Vide Dr. Davis's Midwifery.*)

My object in troubling you, Sir, with this letter is simply this, that through the means of your ably-conducted and extensively-circulated Journal the inestimable value of the osteotomist in cases of so much confinement and distortion of the pelvis as must render delivery by the natural passages, without its assistance, impracticable, may be made known to practitioners living in distant parts of the country. I am, Sir, your obedient servant,

S. HARE, M.R.C.S.

London, July 20, 1838.

Our correspondent seems to be unacquainted with several points connected with the history of the Cæsarean operation. The French and German surgeons have generally recourse to the operation, because they conceive that in a moral point of view the surgeon has no right to sacrifice the life of the child for the *chance* of saving the life of the mother. In the second place, the mortality of this operation is far from being so high as Mr. Hare imagines; instead of being nine out of ten it is but a little over one-third; and, lastly, the operation of crushing the child's head and extracting the body piecemeal, is as fatal a proceeding as the Cæsarean operation itself.—ED. L.

DR. CLANNY'S CASE OF DIABETES.

To the Editor of THE LANCET.

SIR:—As the method which Dr. Clanny has described of testing diabetes is highly commendable, it is so much the more important that any errors in the conclusions which he has deduced from his experiments should be pointed out. These, I consider, are as follow:—

1. This method of detecting sugar in the blood has never been successful in the hands of any chemists; and, as far as I am aware, sugar has never been separated from the blood, even after it had been mixed artificially with that fluid. This is, however, subject for experiment, and I beg to submit it to Dr. Clanny's notice. A French chemist lately mixed a large quantity of urea with a given portion of blood, but could only detect the presence of urea. The nature of the action which the blood exercises upon sugar and urea requires yet to be elucidated; but that there is sugar in the blood in diabetes, was clearly proved by Mr. M'Gregor, in a paper presented to the Faculty of Physicians and Surgeons of Glasgow. This method of detecting sugar was simple and demonstrative; he mixed yeast with the blood which speedily fermented. He tested all the fluids in a similar manner, and nearly "blew up" some patients by exciting fermentation in their stomachs; he actually detected crystals of sugar upon the fæces. That these crystals were pure sugar may be doubted, because, I believe, common salt has the property of taking up so much sugar as to give it a sweet taste.

2. Dr. Clanny concludes that the "fons et origo," of diabetes, in the case he describes, were the kidneys. If sugar existed in the stomach, which Mr. M'Gregor detected in four cases, if I remember rightly, this conclusion must be erroneous, and as Dr. Clanny has given no proof to the contrary, I am inclined to think that he might have found sugar in the stomach and in the blood by adopting the simple method of Mr. M'Gregor; that diabetes proceeds in some instances from an abnormal state of digestion, probably by the conversion of albumen into sugar instead of fibrin, has been clearly proved by Mr. M'Gregor. It is not philosophical to generalise upon such limited data, but we may be allowed to anticipate that such is the constant nature of diabetes. This can only, however, be determined by experiment. There is also a strong presumption that the disease is constitutional, and not local, from the circumstance that I have never heard of a well authenticated case in which diabetic patients recovered under the administration of medicine, that death from a relapse, or some other disease did not speedily follow. Dr. Clanny's case is a further confirmation of this. I submit these remarks on Dr. Clanny's papers with due deference to one of the few physicians who can appreciate the absolute necessity for the application of chemistry to the practice of medicine. Your obedient servant

London 6th August 1838. D.

This letter has been properly authenticated.—ED. L.

YARMOUTH HOSPITAL AND DISPENSARY.

(From a Correspondent.)

ON Tuesday last, July 24th, at ten o'clock, a meeting of the Governors, &c. of the Yarmouth Hospital and Dispensary, which Institution was founded on Thursday,

28th June, in honour of her Majesty's coronation, was held in the Town-hall, for the election of two physicians and four surgeons: the Hon. and Rev. E. Pellew in the chair.

The Chairman opened the meeting by stating, in a few words, the object of the meeting, which was to elect the medical officers; but that the first thing was to determine the mode of voting.

Admiral Sir George Parker proposed they should vote by papers, as in the election of town council, which being seconded by F. R. Reynolds, Esq., was carried by a majority. Admiral Sir George Parker then nominated, and W. Steward, Esq., seconded Dr. Penrice and Dr. Travers Cox as physicians to the Institution.

Mr. Reynolds proposed and Mr. S. Cobbs seconded Dr. Smith.

Mr. John Fenn proposed and Mr. Fyson seconded Dr. Sabine.

Admiral Sir George Parker proposed the surgeons of the old Dispensary, Geo. Bateman, W. S. Ferrier, J, Pritchard, and J. C. Smith, Esqs., who were severally seconded.

T. F. Steward, Esq., proposed and B. Dawson, Esq., seconded Charles Costerton, Esq.

The Rev. T. Clewes proposed Charles Aldred, Esq., who was seconded by several gentlemen at once.

At five o'clock the numbers were declared to be as follows:—

Physicians.—Dr. Penrice, 257; Dr. Cox, 209; Dr. Smith, 96; Dr. Sabine, 40.

Surgeons.—J. C. Smith, Esq., 225; George Bateman, Esq., 210; J. Pritchard, Esq., 198; Charles Costerton, Esq., 191; Charles Aldred, Esq., 186; and W. S. Ferrier, 183.

SUPPRESSION OF QUACKERY.

At the last anniversary meeting of the Provincial Medical and Surgical Association Dr. Macartney suggested that the practice of quackery ought, at least, to be assimilated by the Legislature to "that of obtaining money under false pretences." The French Legislature has, we find, recently decided the question according to the view taken by Dr. Macartney. The following is an abstract of the circumstances to which we allude, taken from the French Lancet, April 14, 1838:—

In the month of January, 1837, three doctors and an apothecary set out from the French metropolis on a tour through the provinces, for the purpose of *giving* gratuitous advice, and *selling* their remedies to all comers. The approach of these gentlemen towards each large town and village was pompously announced by enormous placards, indicating the day and hour of their arrival, their place of abode, titles, &c.

For a short time the scheme of these worthies was crowned with the most brilliant success. Patients arrived from the most distant quarters, and the door of their hotel was surrounded from day-break until sun-set by crowds of believers in the "universal efficacy of the medicaments offered by the members of the Hippocratic Society." Unfortunately, however, the people of Orleans were incapable of appreciating the blessings offered to them at the moderate sums of 1s., of 1s. 3d., and 1s. 8d. per bottle. The doctors and their drugs were seized upon and incarcerated, and the affair was referred to the "Cour Royale" of Orleans.

Upon investigation it appeared that the accused were bonâ fide doctors, and could not, therefore, be prosecuted for the illegal practice of medicine; but this did not save them; the indictment contained also a charge of "swindling, or obtaining money under false pretences," upon which charge the court, considering "that the accused under the fictitious name of 'members of the Hippocratic Society,' sold, at exorbitant prices, certain remedies which they prescribed in a lithographed formula and in an uniform manner, without any distinction of age, sex, or malady," and considering, moreover," that the accused announced *gratuitous* consultations, while their sole object was to *sell* their drugs, that their pretended discovery was merely a mixture of sugar and jalap; and, finally, that they offered to guarantee, in writing, a prompt and complete cure to all persons consulting them, no matter how incurable the disease might really be; the court is of opinion that the accused have, by these acts, been guilty of swindling or obtaining money in a fraudulent manner, and, therefore, condemn S. to *two years* imprisonment and 2000 francs fine; G. to fifteen months imprisonment and a fine of 1000 francs; and M. to one year's imprisonment and a fine of 500 francs."

We leave the above case to the meditation of those who, by culpable negligence, suffer thousands of their fellow men to become a prey to the most designing and abandoned of criminals.

TO CORRESPONDENTS.

Can any correspondent in Worcester inform us what is the nature of the connection existing between Dr. Hastings, of that town, and the newspaper entitled "Berrow's Worcester Journal."

Communications have been received from *Messrs. John Morley, A. B. Maddock, William Moss*, &c.

Justitia et Misericordia shall appear in our next Number.

Chirurgiculus. We decline inserting any anonymous criticisms on papers or cases to which the authors have attached their names.